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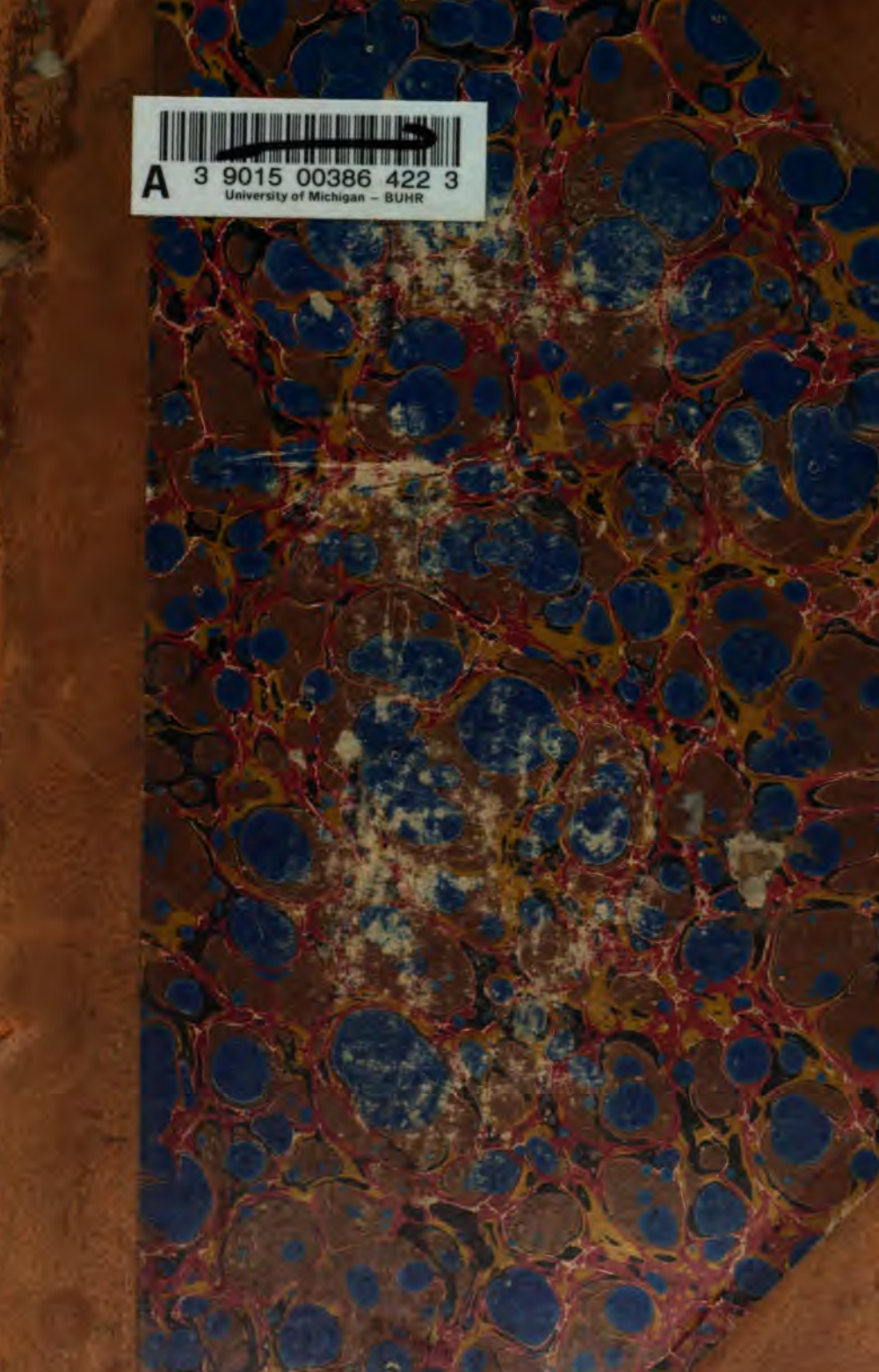
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THE

CHICAGO

MEDICAL JOURNAL.

PUBLISHED SEMI-MONTHLY.

EDITED BY

J. ADAMS ALLEN, M.D., LL.D.

VOL. XXV., 1868.

CHICAGO:
CHURCH, GOODMAN AND DONNELLEY, PRINTERS.
108 *and* 110 *Dearborn Street.*
1868.

CHURCH, GOODMAN AND DONNELLEY, PRINTERS.

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THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—JANUARY 1, 1868.—*No.* 1.

PATHOLOGICAL PHYSIOLOGY.

THE CONTINUOUS VENOUS MURMURS IN THE NECK.

Clinical Lectures delivered at the Hospital "La Charité," by M. Monneret, Professor of Clinical Medicine to the Faculty of Medicine, Paris.

TRANSLATED EXPRESSLY FOR THE JOURNAL, BY WALTER HAY, M.D., CHICAGO.

GENTLEMEN: — This clinical lecture, which will be the last, suggests the approach of vacation, and the paucity of subjects.

I shall devote myself to treating, for your benefit, a question at once theoretical and practical, reviewing as clearly as possible a doctrine which is based upon numerous experiments, and upon facts which it has been easy for you to establish daily at the bedside of the sick.

It concerns the continuous murmurs which have their seat in the neck, and particularly on the right side. I will point out to you hereafter their cause.

The extreme frequency of these sounds, and the progress which the theory of their mode of production has made, render their clinical study necessary.

I do not intend to give you a very complete history of them,

but in consequence of errors imprinted in certain books, and in recent memoirs, it is right that I devote myself to making you acquainted with the truth, from the opinions of men who have best studied these phenomena, and have given a clear theory of them, founded upon the laws of acoustics, upon ideas received, especially respected, and in relation with numerous experiments, with undeniable facts, whose interpretation can not be permitted to be changed.

Two sorts of sounds occur in the vessels of the neck: an intermittent and a continuous sound; the continuous sound, with swells, appears to be nothing else than the continuous sound duplicated with an intermittent one.

Now, under the reign of Lænnec — and his opinions prevailed a long time after him — it was conceded that all these sounds could only be produced in the arteries, in the heart, and in the large vessels proceeding therefrom.

Ogier Ward, in 1837, was the first who expressed the opinion that the vascular sounds of the neck were continuous sounds, which occurred in the veins, and not in the arteries. Almost as soon, Hope adopted his theory, and gave to it the success which could be impressed upon it by a man who had so great a renown in the history of diseases of the heart. This theory became universal in England.

Aran was the first in France who rallied to the support of this theory in 1843. After him, I may consider myself as the one who has studied it most completely in all its details, and taught it, in the year 1847. At this epoch it occurred to me, for reasons drawn from the laws of acoustics, and from the works of Savart and Cagnard-Latour, that there could be a continuous sound only in the veins.

Hence a series of experiments, which I instituted since the year 1847, at the Hospital Bon-Secour, with the view to determine the influence which the sanguineous fluid, put in motion in a tube, could have upon continuous sonorous vibrations, and especially the influence of the composition of the liquid upon the intensity of these vibrations.

The results at which I arrived, furnished matter for four

essential to them: The one is their normal anatomical state, the other their pathological.

Recall what you already know, that the continued vascular murmur exists only on the right (it is clear that I do not speak of arterio-venous aneurisms), to the serious study of which, moreover, I have devoted myself in a memoir presented to the Surgical Society upon the subject of an arterio-venous perforation formed in the popliteal space. There were two sounds, one a continuous sound, the other a swell, and I demonstrated that the continuous sound occurred in the vein, whilst the swell sound was nothing else than an intermittent bellows murmur which occurred in the artery.

I repeat, then, that in the region of the neck, the venous murmur occurs always on the right; if by chance it is not so, and the sound makes itself heard on the left, it is by transmission, and because it is then sufficiently intense to transmit itself from that side. The stethescope detects very readily upon the left side the sound which is formed on the right. I have, moreover, never found this sound elsewhere, neither over the arteries nor the veins of the lower extremities, nor over the other large vessels.

In the next place the vascular sound is the effect of an alteration occuring in the composition of the blood.

Every time that, in a healthy individual, and who consequently exhibits no vascular sound, the blood becomes altered in such a way that it moistens the internal walls of the veins, it produces a sound. The liquid begins to speak. To sum up: The alteration of the blood engenders a sound, a special anatomical arrangement gives origin to this sound, and to localize it in the right side.

It is this anatomical arrangement which I shall now attempt to discuss in a few words.

Three aponeurotic planes exist in the neck. The first, the most superficial, is easily seen in subjects who have little fat. The external jugular rests upon this aponeurosis, in the upper three-fourths of its extent; below this it penetrates it, in order to return into the subclavian fossa, on the internal

surface it unites in order to empty itself into the subclavian vein. It results from this, that this vessel, sustained by the aponeurosis, is continually distended in certain positions which are given to the head in turning it; then the sanguineous fluid rushes through it with its maximum speed. Thus, this membrane should be stretched in order to produce the vibratory trembling, a phenomenon completely parallel to the venous sounds, and derived from the undulatory vibrations.

The second plane is known under the name of middle or omo-hyoid aponeurosis; it connects the two scapulo-hyoid muscles, and is inserted into the sternum, and into the inner border of the clavicle, enclosing in its reduplication the muscles of the sub-hyoid region, and the anterior jugulars.

According to Mr. Richet, who has described with particular care the middle aponeurosis of the neck, this membrane sends out from its lower surface, fibrous prolongations, which attach themselves to the trunks of the right and left brachio-cephalic veins, and fix them to the upper bony rim of the chest. It receives then, in a reduplication, at the level of their opening into the subclavian vein, the internal and external jugular veins.

M. Richet, by reason of this arrangement, assigns to the extensor muscles of the omo-hyoid aponeurosis, the function of maintaining distended all the great veins of the region, and of thus rendering the circulation as easy as possible.

The third plane is that which exhibits the most intimate and most important connections with the vessels of the neck. It assumes an arrangement entirely peculiar, whose connections have been very recently clearly displayed by M. M. Ledentu and Lannelogue, who have had the merit of demonstrating clearly the existence of these aponeuroses, and their arrangement, which it is easy to comprehend by casting the eye over the anatomical specimens prepared by the authors whom I have just named, with this intention.

An aponeurotic layer detaches itself from the lower edge of the thyroid-body, descends in front of the trachea, passes

behind the sternum, in front of the left brachio-cephalic vein, and is inserted upon the anterior face of the pericardium.

Laterally this fibrous leaf is inserted into the internal concave border of the first rib, and higher up it throws itself upon the internal jugular veins of which it forms the enveloping sheath.

But whilst the sheath is simply cellular above the middle part of the neck, in the lower part of that region it is very resistant at the confluence of the subclavian and the right internal jugular, where it forms a fibrous ring adherent to the first rib by one part, to the veins by the other. Not far from this confluence the external jugular empties into the subclavian. This one adheres equally to the former fibrous plane.

This costo-pericardiac ligament is then the true fibrous band which keeps distended the openings of the veins of the lower part of the neck. Moreover, from the lateral part of its deep surface, near its insertion into the first rib, originate two fibrous ligaments, which attach themselves to the brachio-cephalic venous trunks, even in the thorax, and playing, relatively to these veins, the part of suspensory ligaments, preventing their walls from collapsing during the thoracic inspiration.

The inferior thyroidal veins, also perforate this ligament, which forms for them a sort of fibrous semi-canal at the level of their outlet.

To sum up: there exists in the neck, and it is this point which I wish to bring prominently before you, a resisting plane, which sustains the whole venous mass, and maintains distended the superior vena-cava, the right and left brachio-cephalic venous trunks, and the confluence of these two trunks, which is situated to the right and not to the left, exactly in the direction of the brachio-cephalic trunk of that side, which is continuous directly, it should be remembered, with the vena-cava superior.

It is towards this confluence, cylindrical, regular, always distended, that the blood precipitates itself with rapidity, even as far as into the auricle, from the superior parts of the head

and neck. It is here that all the sanguineous molecules, precipitated from the superior part, oscillate, vibrate, and at the same time produce this venous murmur which you hear principally to the right and behind the clavicle, at the head of this sort of general outlet, in which they vibrate and speak the liquid molecules agitated in so many different senses. These vibrations transmit themselves to the upper parts; and thus it is that we can, under the form of sound and of hydraulic vibrations, perceive them at the left side, and especially as far as the middle and upper right side of the neck. It is doubtless unnecessary to recall to you that the transmission of vibrations is effected to an enormous distance, especially in the direction of a liquid current, and that the blowing murmurs of a large pectoral artery is still very perceptible in the popliteal region, and even to the foot. In the experiments which have been made upon this subject, there has been much room for astonishment at this power of transmission, and it thus often becomes a cause of serious difficulty in the detection of the location of murmurs. Such is the entire physiological explanation of the production of sounds; an aponeurotic arrangement accounts for it perfectly, and it is very easy to comprehend why the vibration does not produce itself at the left, and why it is heard there only by transmission.

Let us return now to the second condition which we have to examine, to the influence which the composition of the blood exercises upon venous sounds.

When this liquid, I have already stated to you, is modified in such a manner that it wets the walls of the vessel which encloses it, its flow is accelerated, and a sound is produced. It has been demonstrated perfectly that the intensity of the murmur produced by venous liquid is proportional to the rapidity of the flow of the liquid, and the more readily the liquid moistens the walls, and the more rapidly it flows, the more intense is the murmur; likewise the more aqueous the blood, the less dense is it, and the stronger is the venous blowing. It will appear, especially in all its intensity, if you augment the rapidity of its flow by stretching the aponeuroses of the neck

by a favorable position. Then, also, there can be felt with the finger the peculiar thrill to which I shall revert, and which consists in a series of undulations which transmit themselves to the ear, by a continuous sound with swells, or by musical sounds to which different appellations have been given.

If it is desired to analyze these murmurs, it is perceived that they consist of two sounds, the one continuous, the other intermittent, of a uniform tone, which is dominant, and of a modulated tone which varies incessantly. It is easy to give a clear and natural explanation of this phenomenon. When a cord is made to vibrate upon a sounding-board, and sand is caused to fall upon this latter, then are produced swellings and constrictions, with the same note; the same thing takes place in a liquid which vibrates. Two sorts of vibrations are observed — the one uniform, the other intermittent, abrupt — hence the modulated murmur of the arteries, the murmur de diable (devil), de souffle (bellows), and other names more or less incorrect, which are made use of to designate these sounds. In order to be familiarized with these phenomena, and to have the satisfaction of hearing sounds the most varied and agreeable, it is only necessary to place the ear upon a tube in which a liquid is caused to flow, whilst varying the velocity of its flow, there are reproduced, at once, the most varied intonations. They are recognized in the sounds so varied of this hydraulic organ, whose tones often surpass in beauty those of the wind-organ. I will not dwell upon all these facts, which belong rather to the domain of acoustics than of medicine.

The vibratory thrill, which accompanies the venous murmur, is perceptible to the finger. It imparts a sensation similar to that which is experienced when a cord, making solid vibrations, is touched; the liquid which flows and vibrates in the vein may be accurately compared to this vibrating cord. The vibratile thrill is nothing else than the series of solid undulations of water or of blood transmitted directly to the hand. The continuous, modulated, venous

sound, or that with continuous and intermittent strokes, is the sound which this same solid undulation produces and determines.

There is, then, always certainly to be found united at one and the same point the sound and the vibratile thrill.

The phenomena which I have just indicated, and the interpretation which I have given of them, are so real that they can be reproduced upon the dead body.

Censure has recently been cast upon the comparison sought to be established between the venous sound produced experimentally upon a dead body, and that which is observed in the living. I am sorry for those who find in this neither resemblance nor pleasure; for it is identical both in sound and tone. To deny this identity is to prove that the endeavor to reproduce these experiments has not been made.

When we are so fortunate as to be able to reproduce upon a dead body, with perfect exactness, the phenomena which occur in the living, we are right, it appears to me, in deciding upon the identity of the cause which produces them.

Open the jugular or the carotid of a dead body, fit into the vessel a tube of caoutchouc, which communicates with a reservoir above furnished with a stop-cock: in order to determine a continuous musical sound, it will suffice to open, more or less freely, the vessel, and to give passage to the liquid, after it is certain that the flow is effected with facility. When, in order to increase or diminish the velocity of the flow of the liquid, the body is inclined, at the same instant there is heard a sound very intense and modulated, which is nothing else than the venous sound which has just been produced.

Not only is the sound heard, but also the molecular vibrations are perceived, of which Cagnard-Latour has indicated the mechanism, and which he has designated under the name of rotary molecular murmur.

These vascular murmurs may be imitated so well that they may be listened to for a long time and with pleasure. The true causes of the murmur are apparent to the eye. If it is desired to render the murmurs continuous or intermittent, it

suffices to render the flow more or less rapid: if it is desired to render it more or less strong, it suffices also to increase or diminish the velocity of the current, and that is easy, it being necessary only to vary the inclination of the body or the pressure of the liquid.

If the body is horizontal, a feeble murmur is heard; if, on the contrary, the inclination is such that the speed may be considerable, the murmurs are so intense that they offend the ear, and the more rapidly the liquid flows the more the intensity of the murmur augments, the more decided becomes the tone, and the more intense the vibratory thrill.

In these experiments it is also perfectly easy to verify the other proposition which has been announced: the intensity of the sound is directly proportional to the velocity of the flow of the liquid, and inversely proportional to the opening made in their walls. That is to say, the more rapid the flow the louder the sound, and that, on the contrary, the more contracted the orifice the less intense the murmur.

These are indisputable facts, which admit not the least doubt. Physicians unconvinced by experiment should decide upon them. Certain authors interpose a third cause in the production of vascular sounds; they assume that the wall of the vessel is a little flaccid, loosened, relaxed, and that there are formed in its interior little projections, folds, wrinkles, which originate the continuous venous murmurs; without these little obstacles they can not comprehend the possibility of a murmur. They are completely deceived. In 1850 I was carried away very decidedly, without being committed to it, towards this theory of flaccidity. Now I have come around to this position, that, in science it is always permitted to modify opinions, and to lay aside that false pride which urges one never to say no, when he has once said yes.

In examining anew the theory of which I speak, or rather this modification of it, which appeared to me sufficient to explain these vascular murmurs, I discovered that it was impossible; and moreover no one has demonstrated this

pretended flaccidity of the vessels of the neck, even among chloro-anæmic subjects it has been assumed gratuitously.

Savart, whose authority in physics can never be annulled, after experiments of equally extreme delicacy and precision, by reason especially of the acoustic capacities of his ear, which enabled him to notice intonations, modifications of sound, where no one else would ever have perceived any, had arrived at the belief that the flaccidity of the walls, which receive and transmit, renders them more fit to receive and transmit, but not to produce them. He has proved it by augmenting and diminishing the tension of a membrane; by producing a detached sound, he remarked that the intensity of the vibration increased when he relaxed the membrane, and that it became, on the contrary, more and more feeble as he stretched it, as is seen in the membrane of the tympanum when prepared to receive feeble sounds. There is then a tendency in flaccid membranes to vibrate more readily, in unison with sonorous bodies placed in their vicinity.

The venous walls could enter into a state of vibration if they were free and stretched; but it is sufficient to ruin this doctrine, to notice that the venous membrane is every where adherent by one of its surfaces to the surrounding tissues.

Moreover, it asserts that the walls of the veins in chlorotic and anæmic subjects are far from being flaccid, and especially recall this principle, that there is no vacuum in the organism.

Bleed an animal to whiteness, he falls inanimate; return the blood to the brain by suspending him by the hind legs, the animal revives immediately; if it is left in this position, reparative nature carries the fluids from every point in the organism into the vessels, effects the re-absorption of the serosity of the different fluids, and thus brings them back into the circulatory system. Open now the vessels, the circulatory system is found as full as before; the loss of blood which has been sustained is hardly perceptible. The same thing occurs in the case of one wounded, who has lost a large quantity of blood; as also in that of the parturient woman who has sustained a considerable metrorrhagia. Subjects so anæmic as to

be considered dead, nevertheless returned to life, and soon after their veins were found distended with blood.

After a copious bleeding the vessels are still full and distended; the blood is, however, much paler, because the globules are diminished. There is no vacuum in the organism, and especially in the circulatory system, since another liquid comes immediately to replace the blood; flaccidity can not exist.

I have already stated that Savart had demonstrated the relations of consonance of a relaxed membrane, with one which is stretched vibrating in unison; and this consonance any one may establish for himself, when, in a theater, for example, one attempts to appreciate the most delicate tones. The membrane of the tympanum is then relaxed, and unconsciously the attempt is made to harmonize the most feeble vibrations which come to the ear. In a word, the tympanum has been rendered more flaccid, as Müller and many other physiologists have demonstrated.

But, as has been said already, this flaccidity can not be admitted for the veins of the neck. The walls of the veins are not free; one surface adheres to the aponeurosis, the other is in immediate contact with the blood.

Now Savart always made his experiments upon membranes with a free surface, and the walls of the veins of an anæmic subject should be flaccid, in order that they might be able to vibrate.

It may be objected, it is true, that the flaccidity does not exist, but that there is a liquid which transmits to them immediately sonorous vibrations which originate there. That would be possible indeed if they could originate exteriorly; but they originate in the vein from the collision of the sanguineous molecules.

(*To be continued.*)

INTERNATIONAL MEDICAL CONGRESS,*

CONVENED AT PARIS, AUGUST 16, 1867.

TRANSLATED EXPRESSLY FOR THE JOURNAL BY PROF. FREER.

THE banquet was largely attended, but an air of sadness prevailed. The death of Velpeau — the news of which had been received too late to render it possible to delay this fête — gave an expression of mourning to the entire assemblage.

M. Bouillaud drank to the First International Medical Congress.

M. Palusciano drank to the health of President Bouillaud; which was highly applauded, and with justice.

M. Bouillaud had entered into the necessary work for the success of the Congress with his whole soul. One could see from the first that he deplored the restrictions that the programme — much too minute — imposed upon the discussions.

We reproduce the speeches of M. Bouillaud and M. Palusciano:

M. Bouillaud. GENTLEMEN: — What finer spectacle than the sessions of this assembly! It recalls, in spite of us, that which Cynéas saw when he took the Roman senate for an assemblage of kings. What saw then — said the master of French eloquence (J. J. Rousseau) — what saw then Cynéas that was so majestic? He saw the most beautiful spectacle that had ever appeared under the heavens: the assemblage of two hundred virtuous men, worthy to command Rome and the earth.

The spectacle of our medical senate is not thus sublime. It is not that of the masters of the world; but it is an assembly of more than seven hundred physicians, worthy to serve as models for all assemblies of savans and of sages. Salute, then, our first International Medical Congress.

* Continued from the December Number.

M. Palusciano.—It is not permitted to ourselves to appreciate the work that we will have achieved. The world and posterity will judge. But that which we can verify, is that the idea of a reunion of medical men of all nations for the purpose of discussion is a veritable progress. Our programme has been followed with exactness and fidelity, due to the lively interest and eminent qualities displayed by our honorable President.

In the medical world, no one ignores the important progress for which science is indebted to this learned professor of clinics of the faculty of Paris. And the most of us already know the biography of this indefatigable laborer, who is the honor of the medical faculty of France.

We wish, then, that all future medical congresses may be presided over by like veterans of progress and liberty; and in order to thank him, let each repeat, in his own proper tongue, *Vive Bouillaud!*

COMPLEMENTARY SESSIONS.

At a complementary session on Thursday evening, the 22nd August, M. Brunetti exposed his new method of

PRESERVING ANATOMICAL SPECIMENS.

His method comprises many complicated operations, comprising washing, removing the fat, tanning, and dessication.

The pieces are washed by passing pure water through the blood vessels and different excretory ducts; then the water is removed by passing alcohol through the same channels; following this with ether, in order to the removal of the fat. Having arrived at this point, the piece may be plunged in ether and kept an indefinite time before subjecting it to the subsequent processes, or tanning.

This is accomplished by dissolving tannic acid in boiling distilled water, a saturated solution, and by injecting the solution in the same manner as above, after having chased out the ether by means of injections of distilled water.

The final operation is that of drying the piece, which is attained by passing a heated atmosphere through the vessels and ducts of glands.

The specimens are flexible, light, retain their volume and natural relations. The histological elements are solid, for the liquids have been replaced by the tannic. These pieces can be handled without fear of injury, and may be preserved indefinitely.

After M. Brunetti, M. Laskanski presented some anatomical pieces which were wonderfully preserved, and which had the advantage of retaining the natural aspect respecting suppleness and all other qualities of normal tissues. Unfortunately, M. Laskanski was not prepared to make a revelation of his method of preparation, merely divulging that *Phenic acid* constituted a part of the liquid used in making the injection for the vessels.

The complementary sessions being destined for communications foreign to the primitive programme, were occupied by subjects that had had no relation to each other. Some of them were of real importance. We will speak of that on the subject of the

PROPAGATION OF CHOLERA.

M. Shrimpton observed that the characteristic and constant symptoms of cholera were: 1st. Abnormal cold. 2nd. Alteration of the respiration and non-oxygenation of the blood. 3rd. The intestinal flux. According to him, all the primary phenomena are explained by the asphyxie of the elementary tissues. As soon as the choleraic influences have ceased, reaction may occur even after decease, that which proves that this reaction and the morbid action which preceded have for their seat the cells, the life of which persists still a certain time after the termination of general life.

We can not follow M. Shrimpton in the development of his theory, only adding that he supports the non-contagion theory.

The convictions of M. Shrimpton upon this subject are very firm, as we can see by the following extract:

"Cholera can not be contagious, because the choleric can not carry on themselves the germs of the contagion. To carry the germs of contagion, supposes a labor of elaboration, a period of incubation, such as take place in acknowledged contagious maladies, such as the typhus, yellow, and eruptive fevers. Now this can not take place with those affected with cholera, for as soon as patients are affected with cholera influences, all organic action ceasing, the choleric influence must necessarily extinguish itself in each person, whatever may be their number. Respecting myself, I ask, for instance, that our illustrious President, M. Bouilland, and our learned Vice-President, M. Ricord, conjointly with my honorable colleague of the Hospital Gagliani, may form a commission, to which they may add a delegate from each foreign country, now in Paris, to submit me to all the proofs they may desire to indicate. I will go to bed with a person in the active stage of cholera, will respire his breath as long as the commission may deem it necessary; I will inoculate myself with all the matter proceeding from the body of the patient; in a word, I will submit myself under their eyes to all that may be demanded to carry conviction of the non-contagiousness of cholera to the entire world."

M. Crocq.—"If I speak, it is not for the purpose of opening the question of the nature of cholera, which would require too much time. Notwithstanding, I must say that in most cases, if not in all, the abdominal phenomena designated as premonitory precede the phenomena of asphyxie. These latter constitute neither the essence nor the point of departure of the malady.

"I but throw out this remark, in passing, the time not permitting us to attack this important question.

"My object in speaking is to protest against the doctrines of M. Shrimpton relatively to its contagion. It is very easy to declare that cholera is not contagious; that one must not fear it; that one may confront its contact with impunity; but it is necessary, above all things, to know the truth, even when it may be disagreeable. Besides, know well the enemy that

one has to face, and avow the fact of contagion if it possesses it, than to dissimulate. Fear not that the choleric patients will lack attendance because physicians may recognize the contagiousness of their disease. Do we not care for other contagious and infectious diseases, at the time recognizing their transmissibility? No, gentlemen, the true physician does not recoil before contagious maladies; he knows that which his obligations command, and does not fail to execute.

"Be not astonished, then, to hear me proclaim the contagiousness of cholera. Numberless observations have convinced me of this. M. Shrimpton has informed us that he is ready to inoculate himself with the blood or any fluids whatever of the *cholériques*. That amounts to nothing with me as a contagionist; I am ready to submit to the same ordeal; and I am sure it would contribute to valuable results in the enlightenment respecting the problem of contagion or non-contagion."

AFTER-TREATMENT IN NECROSIS.

BY PROFESSOR GUNN.

At an early period in my professional experience, I encountered the necessity of secondary operations in certain cases of Necrosis. After the usual operation and dressing, while the limb would improve in general appearance, the wound would fail to completely heal, or, if it did heal, it would reopen in a short time. Examination with the probe would detect a piece of necrosed bone, which usually was insignificant in size, but which prevented healing, and necessitated a new opening of the wound for its removal.

Having encountered this experience in several instances, I was led to an examination of some specimens of this disease when the sequestra were contained in separate compartments of the capsula sequestralis, but between which there was a free communication.

In an operation on such a case, the surgeon would probably open the main chamber or compartment, remove the main sequestrum, and fail to detect one or more, which were smaller, and lodged in small side alcoves or compartments, and which, after the removal of the main piece, would naturally work, in the course of a few days, into the place which it had occupied. It is a well recognized fact, that reparative nutrition tends to the pushing out or off of foreign material. Thus, these remaining sequestra would come to occupy the place of the main sequestrum on their route out of the body.

To secure their final expulsion without an additional operation, I devised the plan of introducing into the opening through the walls of the capsula sequestralis, made for the removal of the main sequestrum, a plug or tent of white wax, which fitted the opening pretty accurately, without so completely filling it as to obstruct the flow of pus. This plug is removed daily, it and the wound are cleansed, when it is reinserted. At each dressing, the wound is explored with the finger, and when additional sequestra are detected, they are removed. After they have all come away, or, if they have all been removed at the time of the operation, the fact will be indicated by the gradual filling of the chamber by firm, healthy granulations, after which time the plug may have a piece cut off from its bottom at each dressing, until it is all cut away, and the wound has healed to the surface.

Under this plan of treatment, it has often been my experience to detect and remove one or more pieces of dead bone within the first two weeks after the operation, which had eluded discovery at that time. The tardy growth of the granulations compelled by this style of dressing, secures a firm and healthy healing progress from the very bottom of the wound.

BOOK NOTICES.

MECHANICAL THERAPEUTICS. A Practical Treatise on Surgical Apparatus, Appliances, and Elementary Operations, embracing Bandaging, Minor Surgery, Orthopraxy, and the Treatment of Fractures and Dislocations. By PHILIP S. WALES, M.D., Surgeon U.S.N. With 642 Illustrations. Philadelphia: Henry C. Lea. 1867.

A good book, and well calculated for the purpose it is intended to accomplish.

Surgeon Wales lays no claim to the making of a book "all out of his own head," but in this volume gives us an epitome of the practical experience of himself and others, in the briefest possible form, compatible with practical usefulness.

Part 1st Treats "of the Appliances of Dressing."

Part 2nd Treats "of Mechanical Bandages and Apparatus."

Part 3rd Treats "of Fractures, their Reduction, Dressings, and Apparatus."

Part 4th Treats "of Dislocations, their Reduction, Dressings, and Apparatus."

Part 5th Treats "of the Minor Operations in Surgery."

The illustrations are full, and the description of the form and mode of application of the numerous apparatus and appliances of the art of surgery so complete, that it seems to us that any one with an ordinary amount of surgical knowledge and mechanical skill may, with the aid of this volume, be able both to select and apply the proper apparatus, so as to secure all the benefits possible in any given case.

In our opinion, it is a good book, and one which every student and practitioner needs in his library. Especially would its value be appreciated by the surgeon whose field of

practice is any wise remote from the larger cities, and where he has no full assortment of apparatus from which he may select in the treatment of particular cases.

Typographically, it is like all the books from this publisher—a success.

A Biennial Retrospect of Medicine and Surgery, and their Allied Sciences. Edited by Mr. H. Power and Dr. Austee, *et al.*, for the New Sydenham Society. Philadelphia: published by Lindsay & Blakiston.

On Diseases of the Lungs and Air Passages; their Pathology, Physical Diagnosis, Symptoms, and Treatment. By Henry William Fuller, M.D., Cantab., F.R.C.P., London, Physician to St. George's Hospital, etc., etc. From the Second and Revised London Edition. Philadelphia: Henry C. Lea, publisher.

The reputation of the first edition of this work is a sufficient guarantee of the value of this revised edition. Parts III. and IV., relative to diseases of the heart and great vessels, which made up a portion of the first, have been omitted in the second edition.

Compendium.—Among the very best of our exchanges, we count the *Reporter* of Philadelphia. Edited by S. W. Butler, M.D.

We notice with pleasure that the able and industrious editor has prepared a "Compendium," which is of the very highest order. It is the abstract and essence of the time, and we commend it strongly to the patronage of our readers. Having, unfortunately, mislaid the Prospectus, we are unable

in this No. to give the terms, but will do so in our next. Meanwhile, we are content to advise our readers to address the Editor, S. W. Butler, M.D., 115 South Seventh Street, Philadelphia, enclosing, if we remember, $3, and receive in lieu one of the best works of the kind in the English language.

We will furnish the *Reporter* and this JOURNAL for $6 a year to advance-paying new subscribers, or the JOURNAL and "Compendium" for $5.

OPHTHALMIATRISCHE BEOBACHTUNGEN. Von DR. MED. ALBERT MOOREN, dirigirendem Arzt der Staedtischen Augen-Klinik zu Duesseldorf. Berlin, 1867. Verlag von August. Hirschwald, Unter den Linden, Nr. 68, pp. 345.

This volume is a report of the Clinical observations of Dr. Mooren in one of the richest Ophthalmic Clinics in Europe. It is a report of general results, rather than of special observations, and is arranged under sixteen chapters, as follows:

I. Clinical Statistics. II. Diseases of the Orbit. III. Diseases of the Lids. IV. Diseases of the Conjunctiva. V. Diseases of the Lachrymal Apparatus. VI. Diseases of the Cornea. VII. Diseases of the Sclerotic. VIII. Diseases of the Iris. IX. Diseases of the Choroid. X. Diseases of the Vitreous Body. XI. Diseases of the Lens. XII. Diseases of the Retina. XIII. Amblyopia. XIV. Amaurosis. XV. Disturbance of Accommodation. XVI. Diseases of the Muscles.

The scope and style of the work is novel, at least to us, and is highly illustrative of the great labor and satisfactory results of that labor, which has been performed in the wide field of Ophthalmology in the last few years. In no department of medicine have its devotees been more earnest than in this, and certainly in none have the results been more satisfactory.

SPERMATORRHŒA: Its causes, symptomatology, pathology, diagnosis, prognosis, and treatment. By Roberts Bartholow, A.M., M.D., Prof., etc., etc. Second edition, revised and augmented. New York: William Wood & Co., 61 Walker street. 1866.

PENNSYLVANIA HOSPITAL REPORTS, Vol. I. 1868. Philadelphia: Lindsay & Blakiston. Pp. 420.

DISEASES OF THE HEART: Their diagnosis and treatment. By David Wooster, M.D., etc. San Francisco: H. H. Bancroft & Co. 1867. Pp. 216.

A PRACTICAL TREATISE ON THE DISEASES OF CHILDREN. By D. Francis Condie, M.D., etc., etc. Sixth edition, revised and enlarged. Philadelphia: Henry C. Lea. 1868. Pp. 773.

OBSTETRIC CLINIC: A practical contribution to the study of Obstetrics and the Diseases of Women and Children. By Geo. T. Elliott, Jr., A.M., M.D., Prof., etc., etc. "*Plus on s'élève, plus l'horizon s'étend.*" New York: D. Appleton & Company, 443 and 445 Broadway. 1868. Pp. 458.

HYSTERIA: Remote causes of disease in general, treatment of disease by tonic agency, local or surgical forms of hysteria, etc. Six lectures delivered to the students of St. Bartholomew's Hospital, 1866. By F. C. Skey, F.R.S., etc., etc. New York: A. Simpson & Co. 1867. Pp. 103.

ANNUAL REPORT of the Trustees and Superintendent of the Wisconsin State Hospital for the Insane, for the year ending September 30, 1867.

LOOT.

THE *Galveston Medical Journal* (Prof. G. Dowell), recommends in cases of *poisoning by Rhus Toxicodendron*, and other poisonous species of the Rhus, to bathe the parts with a solution of caustic potash, sufficiently strong to render soapy the skin. This "has never failed to cure it immediately," although he has used it in hundreds of cases, including himself. The potash is used in the proportion of ten grs. to the ounce of water, but may be increased in strength as needed. A stronger solution will relieve the effects of the same poison upon the skin of animals.

F. B. Greenough, M. D., of Boston (B. M. & S. Jour.), in an article on *Gonorrhœal Rheumatism* observes: "With regard to treatment, perfect rest is the most essential part. If the pain is severe, two or three leeches may be applied with relief. Evaporating lotions may also be tried. When there is an effusion into the joint, the part may be rubbed with a salve containing iodine or iodide of potassium. If resorption does not take place, compression should be used, either by bandages, or still better by compressed sponges. All authorities agree that the remedies which have been supposed to be beneficial in rheumatism, such as the alkalies, colchicum, iodide of potassa, etc., have no influence in this affection. Perhaps it is lucky for us that the differential diagnosis is not dependent on this fact alone. The urethral trouble must be treated exactly the same as it would be if no articular complication existed."

A correspondent of the same journal furnishes an abstract of a paper before the French Academie Imperiale de Medicine, by Prof. Semola of Naples, on *Bright's Disease*, which

concludes: "According to this author, Bright's Disease is not the result of a primitive anatomical lesion of the kidneys, but is a result of the double series of effects [prevention of the oxidation of the materials introduced into the system in the form of peptones (the products of the digestion of albumen), and resulting congestion of the viscera, especially of the kidneys] which succeed the more or less sudden suppression of the functions of the skin. The aim of the physician should be to re-establish these functions, and thus increase oxidation of the peptones, and relieve the renal congestion. Among the means best suited to this purpose are the ordinary sweatings, or, in obstinate cases, hot air baths, always followed by cool or cold shower baths; preparations of arsenic, and inhalations of oxygen. The diet should be vegetable or starchy, with but very little meat."

The *Abortive Treatment of Typhoid Fever* by repeated blistering over the iliac region is revived by Dr. Strong of Buffalo, and the editor of the *Pacific Medical Journal* is inclined to concur with him. The latter observes that this method has been employed by other California physicians. He also suggests that other topical means may be resorted to.

The *Brown Cod Liver Oil*, it is still insisted by some, is the most efficient because it contains the most biliary matter.

Maisonneuve treats *Mammary Cancer* by a new method. He passes a bistoury into the tumor, and afterward inserts slips ("arrows") of dried chloride of zinc and flour into the cavity, where they are allowed to remain and gradually dissolve, this usually requiring about ten days. The slips are made by mixing equal parts of the chloride and flour. The paste thus formed is dried, and the slips cut of the size desired. The pain is said not to be very great, and the effect is to kill the tumor by mummifying the tissues. The process is designated *cauterization en fleche*, and seems to have points of superiority over that adopted by the colored gentleman whose

exploits in cancer curing a few years since are still remembered in Paris and elsewhere.

Dr. Durkee (B. M. J.) recommends common soft soap, well rubbed in, as the best application for *Scabies*.

Acetic Acid injections into *Cancerous Tumors*, according to the report of two cases by Fred. D. Lente, M. D., of Cold Spring, N. Y., (N. Y. Med. J., Dec., 1867,) do not seem to sustain the encomiums lavished upon them across the sea. Though great care was taken, and the cases themselves favorable, the result was failure in each.

Permanganate of Potash, gr. ss to the ounce of water, is recommended strongly as a gargle in Diphtheria. "Its use should be accompanied by ferruginous tonics, wines and careful nourishment." True. *Carbolic Acid* is also commended for this purpose.

Mr. Charles Sedgwick, in the *Medical Times and Gazette*, prescribes the following form: ℞ Acid, Carbolic Mxx; acidi acetici, half a fluid drachm; mellis, two drams; tinct. myrrhæ, two fluid drachms; aquae q. s. to six fluid ounces; mix and make a gargle. The carbolic and acetic acids to be well shaken together; the honey to be added to the water gradually. Internally tincture of iron and quinine."

Dr. Lortet (*Reporter Periscope*) has administered in a few cases of *Tape Worms*, which had resisted the usual remedies, *Sulphuric Ether*, which apparently acted upon them as it does on man, as an anæsthetic, rendering them insensible, when they are easily removed by a mild purgative. The plan is to give five drachms of ether at a dose, and to follow it in two hours by an ounce of castor oil. The worm is discharged without causing pain, entire or almost so, and always with the cephalic end intact. Though but few have been thus treated, the practice is worth bearing in mind.

Quite a range is it in the treatment of *Gonorrhea* from argent. nitrat. forty grs. to the ounce, down to the latest proposed lavement, which is finely powdered starch mixed with lukewarm water to the consistence of cream, but thin enough for injection. Yet M. Luc (*Lond. Lancet*), military surgeon, finds it excellent either in painless discharges or when the inflammatory stage is over.

Nutrition.—Dr. Lionel Beale believes that the serum of the blood is the nutritive pabulum of the body; that the red corpuscles are concerned in its distribution and in preventing changes in the composition of the great mass of the blood as certain constituents are removed from or poured into it; that the white corpuscles are masses of germinal matter concerned in the formation of the serum as well as of the red corpuscles; and that the special products of nutrition depend not so much on the characters of the pabulum as upon the *converting* powers of the germinal matter throughout the textures and which *appropriates* from the pabulum the materials it requires. The red corpuscles have therefore assigned to them a secondary position as agents of nutrition. The principal argument in support of this is derived from the fact, that elaborate tissues are formed in animals which have no colored blood corpuscles. According to Beale, three distinct phenomena are involed in nuitrition. 1. The contact of the soluble pabulum with the germinal matter of the tissues. 2. The separation of the elements of the pabulum from their state of combination. 3. The rearrangement of these elements and the conversion of some of them into new germinal matter.—*Journ. Anat. and Phys.*, Nov. 1867, from *Quarterly Jl. of Microscop. Sc.*, July, 1867.

Pepsine in Vomiting of Pregnancy.—M. Gross has used pepsine in doses of eight grains before meals, with complete relief, in a case of obstinate vomiting in pregnancy.

EDITORIAL.

With this number commences the Twenty-Fifth Annual Volume of this Journal, and it is with unmingled pleasure we undertake both its enlargement and more frequent issue. In these times the monthly bears about the same relation to the real wants of the profession that the semi-annual did a few years since. When the means of communication between the different parts of the country and the world were more limited, the thoughts of men were slowly concentrated, and the Medical Journal was obliged to depend on the professional contributions of those within its own limited sphere. Now the learned, observant and experienced, every where about the globe, can speedily bring together whatever of the new, and possibly true, they have gathered up, and cast them into the crucible of universal analysis. The Present becomes its own sharply interrogating and impartially judging Posterity.

The Profession, having thrown off the trammels of old-time dogmatism, can not wait the slow processes of antiquity. It must move in the van of the grand march of Progress which distinguishes the age. It is needless to say that, for this purpose, the means of communication between its members should be facilitated to the greatest possible extent.

For this, among other reasons, the Journal advances from the monthly to the semi-monthly—anticipating the not distant future when this will be replaced by the weekly, and within the next quarter centennial period by the daily.

If it were not for the editorial horror of elongated articles, in this age of telegraphic conciseness, there would be more written here on this point, but why "carry coals to Newcastle?" This semi-monthly is already an established fact, and its success as such placed beyond contingency.

The Editor congratulates his subscribers, both old and new, on the advanced position, and extends to them the salutations of the New Year.

To CORRESPONDENTS.—To insure early insertion of your favors it is necessary that they should be condensed to the last limit of perspicuity. Many articles, containing much of real value, have lingered long in the editorial "pigeon holes," because failing in this essential particular. The readers of the JOURNAL, we are proud to know, are well up in the text books and standard treatises. They do not need these elaborated, re-worded, or even quoted. A little reflection on this point will save a great deal of unnecessary manuscript, and, what is of more importance, be vastly more likely to secure careful reading of the communication. Short and pithy articles are read, whilst long ones are postponed to some rainy Sunday or day of leisure, which rarely occurs to the busy gentlemen who take the JOURNAL.

PROCEEDINGS OF MEDICAL SOCIETIES.—Thanks are returned to friends who have forwarded memoranda of the transactions of their local organizations. That these have not been published in the JOURNAL has not been from want of proper appreciation of their kindness, or deficiency in respect, but simply from physical impossibility. Since the present Editor has been in charge of the JOURNAL, the number of these communications received has been such, that to have published them would have absolutely excluded all other matter. Abstracts of valuable papers, or the papers in full, if not too lengthy, will be cheerfully inserted whenever opportunity offers.

THE INTERNATIONAL CONGRESS.—We omitted to mention in the last No. of the JOURNAL, that we are indebted for the original translation and abstract of papers and discussions

before the International Medical Congress, to the busy pen of our distinguished colleague, Prof. J. W. Freer, who was himself present as a member of the body.

The series, as a whole, will be read with interest by those desirous of knowing whereof the medical world is thinking. The topics discussed were, in the main, of the most important character.

The Present Raid on the Uterus.—The following extract from the address of Dr. W. D. Buck, before the New Hampshire Medical Society, is copied from the St. Louis *Medical Reporter:* "The uterus is a harmless, inoffensive little organ, stowed away in a quiet little place. Simply a muscular organ, having no function to perform save at certain periods of life, but furnishing a capital field for surgical operations, and is now-a-days subject to all sorts of barbarity from surgeons anxious for notoriety. Had dame Nature forseen this, she would have made it iron-clad. What with burning and cauterizing, cutting and slashing, and splitting, and skewering, and pessarying, the old fashioned womb will cease to exist, except in history. The Transactions of the National Medical Association for 1864, has figured in 123 different kinds of pessaries, embracing every variety, from a simple plug to a patent threshing machine, which can only be worn with the largest hoops. They look like the drawings of turbine water-wheels, or a leaf from a work on Entomology. Pessaries, I suppose, are sometimes useful, but there are more than there is necessity for. I do think this filling up the vagina with such traps, making a Chinese toy-shop of it, is outrageous. Hippocrates said he never would recommend a pessary to procure abortion, nay, he swore he never would. Were he alive now he would never recommend one at all. If there were fewer abortions there would be fewer pessaries, and if there were fewer pessaries there would be fewer abortions. Our grandmothers never knew they had wombs, only as they were reminded of it by a healthy fœtus; which, by the by,

they always held on to. Now-a-days, even our young women must have their wombs shoved up, and if a baby accidentally gets in by the side of the machinery, and finds a lodgment in the uterus, it may, perchance, have a knitting-needle stuck in it eyes before it has any. It is the easiest thing in the world to introduce a speculum, and pretend to discover ulceration of the os, and subject a patient to this revolting manipulation once or twice a week, when there is, in fact, nothing the matter. By some practitioners, all diseases which occur in the female are attributed to the uterus. In this class are especially to be included all such as make of the abnormal conditions of the uterus a specialty."

Rush Medical College — Spring Course of Instruction. The spring course of instruction in this institution will commence on Monday, the 2nd day of March ensuing, and extend through three months. There will be daily recitations and lectures, together with unusual advantages for clinical instruction at the various hospitals of the city and the college dispensary. Details will be given in the next number of the Journal. Full information can be obtained by addressing the Secretary of the college. See advertisement. Prof. Blaney will open his school of instruction in analytical and applied chemistry at the same time, in the laboratory of the college.

JUCUNDE.

While we deem it of the first importance that the physician in the performance of his duties as a practitioner should consider, first, whether to give; next, what to give; then, how much to give, it is often of no less consequence that he consider well how to give his medicines. A bungling mixture may defeat the object of the most appropriate remedy. And it is worthy of commendation, that the attention of the profession, as well as pharmaceutists, is being directed especially

to this too much neglected subject. The manufacture of granules and sugar-coated pills, containing not only the preparations of the pharmacopœia, but many of the more common prescriptions, is a stride in the right direction. Another, of no less value, is the preparation of the more usual and desirable combinations of bark, the various salts of iron, strychnia, and other drugs, in eligible forms for administration as elixirs, syrups, etc. These can often be better prepared in the laboratory of the chemist than on the table of the apothecary, and to be useful in practice, must contain the active principles of the drugs they represent, in precisely the quantities stated in the formulæ.

Many of this class of preparations found in the shops, from the employment of inferior drugs or other faults, are unreliable in strength, and practically worthless.

But while we favor the use of such preparations on the score of convenience and elegance, we can not refrain from a hearty condemnation of empiricism in any of its forms, whether on the part of a superficial or indolent practitioner, who glides into a mere routine, or the druggist who first offers his preparation to the profession, then recklessly gives it to the "public," basely quoting any favorable opinion he may have received from a medical gentleman to aid him in his illegitimate traffic.

We are led to make these remarks from noticing that the firm of Reed, Carnrick & Andrus, chemical manufacturers, New York, are now offering their products in this market. And from the reputation of the house, and the favor with which their medicinal compounds have been received by the profession, where they have been used and thoroughly tested, we believe they are well deserving confidence, and will prove of value to the careful practitioner.

The next number of the Journal will be issued on the 20th inst.; thereafter, promptly on the 1st and 15th of each month. It will be mailed hereafter exclusively from the Editor's office.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—JANUARY 15, 1868.—*No.* 2.

SYPHILIS.

A Report made to the Iowa State Medical Society, by Dr. W. F. Peck, of Davenport, Iowa, late House Surgeon, Bellevue and Blackwells Island Hospitals, New York.

HAVING been assigned by the Society to report on the surgical diseases of the organs of generation, I purpose considering, at some length, the disease which, above all others, most interests the physician and surgeon. Inasmuch as its consideration, in the strict surgical sense, would be, from necessity, incomplete, I design making use of a latitude best calculated to carry out the import and interest of the present paper, as well as elicit opinions, hitherto unexpressed, in this organization. In analyzing the subject of Syphilis, the time is not to be consumed in making researches into its historic origin and early insinuation into human society.*

What benefit does it confer on civilization to know whether Moses and the Israelites suffered from specific contagion, or whether the whites of America and the modern population of

* At the meeting, in 1866, I made a report considering, at length, the history of the disease.

the Old World received the disease from the American Indians, and by way of Kamtschatka?

The professional world has, with each succeeding century, advanced and retrograded with such strict parallel, that until within the second quarter of the 19th century, our apparent permanent improvement, in developing practical information relative to the diagnosis and treatment of Syphilis, has resulted in comparatively little benefit to those whose misfortune it is, and has been, to be tinctured and saturated with the most treacherous and destructive of poisons—*Syphilis.*

Recognizing, as has been done for many years, the division of specific ulcerative diseases of the generative organs into two classes—viz., Syphilis, by which I desire to be understood as meaning a local sore on the penis, or elsewhere, produced generally by sexual intercourse, and, at the same time, currently disseminating the specific poison throughout the entire system, by means of the circulating fluid, and sooner or later manifesting itself in the cutaneous-glandular membranous, ligamentous, and osseous systems, and syphilides, mites, or chancroids, or a local ulcerative sore, the ravages of which are purely local only when the system secondarily suffers from the local ulcerative irritation. I design arranging the subject into these two general heads, and regard them as entirely separate and distinct from each other, yet, both being specific, and ordinarily received under similar circumstances, and in the same way. Syphilis is generally conceded to be communicated at the time of intercourse, and many have, and still continue to assert, teach, and practice, that the poison can only be communicated to a second person through an abrasion or ulceration of the tissues.

While I believe that the disease is often—I may say usually—communicated in this way, I also believe that it is often transferred from one person to another without even breaking continuity of tissue.

In an individual bearing a chancre, there is, at the same time, the latent poison circulating in the blood and secretions

of the body, all of which are taken from the blood immediately before their consummated preparation is known by a distinctive name.

It is by no means necessary that the individual should have a chancre at the time of communicating the poison.

I believe that a person who has never had the disease can receive it from a person who may have it, by actual contact in almost any form—through the semen—contact of the hands—contact of the body, as in sleeping—and, in fact, any position of the body which will permit a transfer of communicable poisons. If the poison of Syphilis is received into the blood, and, like the inexplicable leaven of the Pharisees, is disseminated throughout the system, why should not the secreted fluids, which are a separated part of the blood itself, contain some of the poison with which it has been associated in its earlier existence. No one at the present day doubts the hereditary history of Syphilis.

If the poison contained in the germinating fluid of the male be communicated to the female through the segmentation of the ovum, made so by the spermatozoa of the semen, why can not the semen, which remains for an indefinite length of time, in many cases, in contact with the absorbent vessels and cells of the vagina, be absorbed, or the poisonous leaven of the semen be absorbed, and thereby be made to come in contact with every living cell in the human economy.

It is not necessary at this time to attenuate on the absorptive capabilities of the skin and mucous membrane. Admitting that agents of atmospherical and chemical nature are admitted through these several tissues, why, I ask, in the same connection, can not the unanalyzed and mysterious poison of Syphilis be introduced or admitted into the system through the same avenues?

It may be asked, can a male who has not Syphilis receive it from a female who has the disease in its secondary form, without receiving it through tissue broken by the specific poison? There is always a natural secretion in the uterus and vagina, and generally there is in woman what may be termed

a hypersecretion, from the cells there located. If the blood from which the fluid is separated contains the poison, as before remarked, why should not the Glandulæ Tysmii absorb or take from the fluid the poison, without abrading the tissue? And, just at this juncture, I desire to state that I believe that a chancre can be produced by a person who only has the disease in the second and last form.

In doing so, the tissue cells are worked excessively by the irritating or poisonous fluid, and in thus laboring, the walls may be broken in some of them, and the adjoining cells, in exerting themselves in the effort to repair, in succession break down, and the result is, an ulcer or chancre, specific in character. In the summer of 1866, a gentleman applied to me for treatment of ulcerative disease of the glans-penis and prepuce. I found several ulcers on the different parts of the organ mentioned, and accompanying them there was badly strictured phymosis. The phymosis was so complete, that I could not obtain a good view of the multiple ulcerations.

The diseases were all removed and remedied by circumcision. No difficulty intervened to hinder an uninterrupted recovery.

About two months subsequent to the operation, a lichenous eruption appeared on the face, arms, and back. I immediately placed the patient on specific treatment, when the local evidence disappeared; but within twelve weeks, I was called to treat the wife of the gentleman, whose age was 30. She had never had offspring. She first complained of sore throat, and soon after, the face was the seat of a specific acneated eruption.

The system became exhausted, and, as a consequence, a state of morbid nervousness was prominent. Ulceration appeared in the nose, and soon after some fifteen ulcers appeared on the inferior extremities. Under suitable management, the signs and symptoms subsided, and she is now apparently well. No sore of any kind ever existed on the genital organs. Upon minute inquiry, I found that no preventative was employed by either party to avoid pregnancy.

Intercourse was rather often, and the seminal fluid remained within the vaginal cavity. She had more or less leucorrhœa, caused, I believe, by the irritating presence of the male fluid. Both patients are still under my professional care.

Case II.—In 1863, Mr. B—— had an ulceration on the glans-penis, which occurred some ten days after intercourse with a woman whom he believed to be healthy in every respect. He was treated a short time, and discharged cured. In 1865, he applied to me for advice in relation to his wife's condition, which was as follows. She had had an eruption, I should think from the description given, of psoriasis, which lasted for several months, when neuralgia became an almost constant trouble. She also had iritis and ulceration of the throat, followed in a few months by periostitis of both tibial membranes. She had never had an ulceration of any kind on the organs of generation. I requested an examination of the husband, and found on the left tibia a node which had given him a good deal of nightly trouble, but thinking it was benign rheumatism, he used simple remedies, all of which afforded him no relief.

I have treated both husband and wife, and they are now apparently free from specific disease. They have one child, five years of age, and perfectly healthy. Upon inquiry, I found that no precaution is, or ever has been used to guard against pregnancy. Intercourse averages once in five days, and the seminal fluid remains unremoved from the vagina. From the above cases, together with the vast amount of accumulative testimony on record, I am well satisfied that an abrasion of the surface is not necessary to transfer the poison of Syphilis from a first to a second party. All of the effects of *Aconite* and *Belladonna* can be produced by causing them to come in contact with the absorbent vessels, and still more authentic record has proved, that although a long time might elapse, yet the virus would eventually act on a healthy skin, after having, of course, completely sodden the epithelial covering.

Babbington, the commentator of Hunter's written opinions

says, "The character of the primitive venereal affection is *essentially* an induration *passing* afterwards into an ulceration." Does this argue less than absorption first, with breaking down of cell tissue after the system at large has been contaminated? Hunter himself entertained this opinion, but owing to a want of distinctive practical proof, he refused to introduce his belief into the form of a general histological law. Diday gives a case in his memoirs, where a syphilitic infant was introduced into a small village to be nursed by a wet-nurse who received the disease, and afterwards was the means of propagating it to a considerable number of the town population. Dr. Bargioni, an Italian physician, who was so sceptical in his belief in science, could not receive any other opinion than that entertained and taught by Ricord and Europe, years ago, and, willing to give practical demonstration of his belief, he suffered the blood to be taken from a woman who had the disease in its secondary form, and inoculated into his own system. In four days all signs of the inoculation were gone. After a few days, he noticed an itching, and, on looking at the arm, there was observed a round papule of a red color, but no induration around it. The papule gradually increased, and in eight days was of some size, and covered with a silvery scale. Eleven days after its first appearance, two glands in the axilla became enlarged. On the sixteenth day, these glands were larger, and upon removing the papule, a small quantity of serosity was found beneath, but no induration around it. On the eighteenth day, there was an ulcerated surface, with a crust on it, and a certain amount of hardness at its borders. On the twenty-third day, it was larger and harder, as were also the glands. A month after the first appearance of the papule, he had nocturnal pains in the head, and observed some enlargement of the cervical glands. A week after this, a roseolous rash appeared on the body and spread all over him, leaving no doubt of its nature. In another week, the sore was not disposed to heal, and the glands were larger. The rash then

became copper-colored. Remedies were then given, and the sore commenced to heal.

If medical men are averse to these opinions, why are they so particular in making inquiry after pure and healthy vaccine matter. I might go on multiplying evidence, but I think already sufficient has been adduced to confirm what I set out to prove.

Chancroids — or — in order to consider the specific malady, Mild Syphilis — I will term it Syphilides Mites, although I scientifically consider them entirely separate and distinct diseases. Chancroids are generally received at the time of intercourse, and the ravages are always local. until the irritation has provoked an exhausted system, which may induce the attendant to regard the disease as Syphilis. There are no stated or constant descriptive symptoms which can be relied upon at all times. Those careful writers and observers who see in chancres invariably the circular, even-cut, half-split-pea excavation, with circumscribed indurated base, see in the chancroidal ulcer an irregular, ragged, superficial ulceration, with a disposition to spread or extend its area of surface rapidly, and no tendency to respect geometrical angles or circles. The fluid — the result of all disintegration — is of a grayish, yellowish color, and usually abundant in quantity, and wherever it may chance to be deposited it manifests the same creative tendency, and where in Syphilis the ordinary disposition is to form but one ulcer, in chancroidal disease the tendency is always to exhibit multiple characters.

If the system of a patient bearing a chancre, or multiple chancre as sometimes happens, becomes depraved and exhausted, the same disposition to wander, ravage and destroy may be seen; but these conditions are far less frequent than they are in specific disease denominated chancroids. The eruption, iritis, falling of the hair, pharyngitis, ulceration of the throat, including vocal chords, mucous and osseous ulceration of the nose, periostitis, and ulceration of soft tissues in all parts of the body, and, lastly, caries and necrosis of the bones

are almost always confined to, and symptoms of, Syphilis proper.

Hereditary Syphilis is a disease too little studied, and, consequently, too little understood by the medical profession.

How far in a pregnant woman the structures connected with the nourishment of the fœtus in utero may suffer from the effects of Syphilis has not yet been determined with scientific accuracy.

The still-births and abortions by women affected by this disease are too common to receive extended notice. But in these instances the cause is in the fœtus itself; it is diseased, dies, and is thrown off. But miscarriages are by no means infrequent in tainted women, even when the fœtus itself shows no signs of disease. In such cases it has been satisfactorily shown that the placenta has been the seat of specific deposit. Children who are born with Syphilis are recognized by their impoverished look and morbid condition of the tegumentary system. When the disease is not prominent at birth a roseolous eruption, sometimes lichenous, appears, accompanied by ulceration in the mouth, and very often snuffles, together with condylomata, and sometimes the eyes exhibit a marked evidence of the systemic taint. Under treatment, and often without, these cases get well within a year, and the wise parties are satisfied that the disease has been cured. But sooner or later the poison re-presents itself, and the patient shows a puny, ill-developed constitution, and is constantly troubled with some disorder of the organization.

Interstitial keralitis and deafness and, later, organic renal disease are prominent. What surgeon can recognize the greatest of human ills in the infant or youth and not sympathize sadly as he reads the prophetic edict in the countenance of the innocent. "The sins of the fathers shall be visited upon the children, even unto the third and fourth generation."

With an understanding knowledge of Syphilis, the most important of all questions is that of treatment.

TREATMENT.—I treat all ulcerations of the penis specific in character with the most active escharotics. Fuming *Nitric*

In employing the local plan sketched, the wants or necessities of the system at large are by no means to be overlooked or neglected. Beef and mutton in substance and fluid extracts are to be especially administered. Stale bread, milk and potatoes are also to be used daily. He who allows an abstemious diet to enter into his treatment will suffer a want of corresponding success. Daily baths containing a small amount of *Sulphuric acid*, are both grateful and valuable. Whenever the granulations manifest a very active disposition, use a little *Nitrate of silver*, as often as indications require, immediately within the line of circumference, until new integument forms the future cicatrix. I am not of the opinion that *Calomel*, as a local application, in chancres, is of any more value as a healing remedy than *Bismuth* or *Magnesia*. Almost anything that will absorb and remove the irritable secretion will aid the formation of new tissue. In my hands *Tannin* acts admirably as a dry remedy.

The time for commencing internal treatment in Syphilis is agreed upon by all observers to be when the disease is recognized. Notwithstanding my practical and observatorial experience in this disease, I am very often, and I might say *too* often, at a loss to discriminate between Chancroids and Syphilis, as presented on the penis. And, rather than inflict upon my patient a course of *Mercury* and other depletant remedies unnecessarily, I wait until the skin osseous or mucous tissues give me information positive as to the location of the disease in the circulating fluid. I am aware that this course of management will be criticized. But calm, reflective consideration should be used in analyzing the disease, together with its development, and it ought to appear evident that it is better to wait only a little longer and be certain that the disease exists, than to act on false or uncertain supposition, and thereby provoke incalculable injury.

I do not desire to be understood as saying that the effects or results of medicine used in treating Syphilis are, or can be, as injurious as the poison itself. In my opinion, no other

poison or disease can be compared to Syphilis in its ravages and devastating process.

Legitimately, Syphilis has but two stages, although writers and commentators arrange it under three stages, viz.:

The first to include the disease from the time the poison is received up to the time it shows systemic development.

The second and last — from the time it shows systemic development up to the time it terminates either in death or recovery.

When I am perfectly satisfied that the penis augurs Syphilis, I immediately commence internal treatment.

Mercurial ointment, with occasional small doses of *Calomel*, is, and has been, in my hands, by far the best remedy. It does not derange the digestive organs and thereby deprive the surgeon of an all-important adjuvant in treatment.

The effects of the medicine are almost as quickly produced as when remedies are given internally. At the same time, *Mercury* can best be controlled in form of administration. I direct it to be used in the axilla, groin, and popliteal space alternately, on opposite sides, and as often as the condition of the patient demands it.

When it is not convenient to use the ointment, I use *Proto-iodide of mercury* pills. But when the remedy is to be continued for a long time, I use the *Corrosive chloride of mercury*. In the last part of the second stage, I find no remedy that will supply the place of *Iodide of potassium*.

I give, however, much larger doses than is usually recommended. Often the *Potassium* will so accelerate the action of the glandular system as to bring or send out the eruption more profusely. When it does, disregard the solicitations of the patient, and the eruption will disappear much sooner under the *Potassium* than it will under the *Mercury*. Never fail to keep a watchful eye on the digestive system—good food and plenty of it must always be insisted upon. A healthy or active digestive system will assist very materially in neutralizing and throwing off the poison.

I have tried vapor-baths, but all plans of treatment are

secondary in my hands to that described and advised. Whenever any of the glands give evidence of the formation of matter, let it out. Syphilitic glands rarely suppurate. Sympathetic bubos are common. Sometimes *Iodine* has a discussive influence, but less frequently than is believed. A saturated solution of *Nitrate of silver* will usually remove scabches or ulcerations of the mucous membrane.

I have no confidence in the plan of Boeck. In 1862, I witnessed, in Blackwells Island Hospital, a series of unsuccessful experiments with syphilization, by Dr. J. E. Taylor. I never grant a final discharge to my patient in a less time than one year, and sometimes a much longer period is necessary to cure the disease.

I hope, from time to time, to review this interesting subject in the deliberations of this organization.

PATHOLOGICAL PHYSIOLOGY.

THE CONTINUOUS VENOUS MURMURS IN THE NECK.

Clinical Lectures delivered at the Hospital "La Charité," by M. Monneret, Professor of Clinical Medicine to the Faculty of Medicine, Paris.

TRANSLATED EXPRESSLY FOR THE JOURNAL, BY WALTER HAY, M.D., CHICAGO.

(*Continued from page* 13.)

I COME now to the most important consideration of all in the question which we are now studying; I refer to the composition of the blood. I made numerous experiments upon this subject in 1847.

It is manifest that, of two liquids, advancing with equal rapidity, flowing at the same inclination, starting from the same height, and subjected to the same pressure, the one which produces the most intense sound is that which wets the most thoroughly the walls of the tube enclosing it. If a

mixture of water and alcohol be used, the most intense sound and the most beautiful modulations are produced. The same effects are obtained with a solution of table salt or of carbonate of soda. If, on the contrary, the experiment is made with viscous, thick or ropy liquids, which flow silently, and whose molecules adhere together, scarcely any sound is obtained. Such is the result of experiments performed with pure milk, with a mixture of milk and water, with oil, or with a decoction of marshmallow. I have been enabled to use these liquids in large quantity, and to experiment, in a complete manner, in the public hospitals.

Mercury, which does not moisten, rolls also without sound; but it must be added that *Mercury* exists under peculiar conditions. According to physicists, it does not possess the properties of liquids, and should be put completely out of the question. I have never produced vibrations with *Mercury*, whatever may have been the height of its fall. All those liquids which moisten thoroughly, flow more rapidly than those which moisten imperfectly.

It is always the velocity of the liquid which produces the continuous sounds and the swells, continuous and intermittent murmurs. Such is the conclusion necessarily reached, whether the liquid be permitted to flow, or be forced mechanically; and even, I do not hesitate to say — although this word has offended some very sensitive persons — with a syringe.

Others may jest about experiments, which are somewhat rude, it is true; but when these experiments reproduce with perfect exactness the phenomena announced by such as Savart and Cagnard-Latour, it is then time to be serious, and to assert physical laws, which are superior to these feeble attacks.

The experiments which M. Parrot thought it necessary to attribute to M. Chauveau, I had already made in 1847.

In 1833, Laharpe (de Lausanne) investigated the influence of liquids upon the production of sounds, and arrived at results identical with those I have exhibited to you.

M. Parrot has therefore misquoted. If I notice this error, it is simply in order to establish a fact which is often observed

in the incomplete historical researches, which each one presents in his own manner.

I have never thought of claiming priority in investigations which have been for a long time already public property.

After what has gone before, I hope, gentlemen, that you can not cherish any doubt about the influence of the composition of liquids upon the production of sounds. If you apply what I have said to the sanguineous liquid, you perceive that, when this liquid is modified in such a manner as to become more fluid, to wet the walls of the vessel, and to flow more easily, the vascular murmur of the neck appears, it is on the right that you find it; you know to what anatomical causes this is due in part. Two conditions suffice to produce it; the one is constant — this is the aponeurotic arrangement; the other is variable — this is the composition of the blood. Nature, in order to arrive at her ends, has no need to multiply mechanisms; it is sufficient to add to them some modifications. It belongs to the physician to apply vital laws to physical objects.

Thus, the material arrangement does not suffice to originate a murmur, notwithstanding the cause is always persistent. A still further modification is necessary, which should cause the phenomena to reappear every time the appearance of a vascular sound, of the nature of those we are studying, is established; and it can be determined that the blood is altered in its composition. It is useless to analyze them; others have done it before us, and with such precision that we can not refute their evidence.

What I say of the venous murmurs, I say also of the vibratile thrill; for they can not be separated, the one from the other. They appear together — 1st, when the blood is diminished in quantity; 2nd, when it has lost a part of its most essential element — that is to say, when there is a diminution of the globules. The globules seem indeed to render the blood more viscous, and to give it the property of rolling silently in the vessels. Its velocity then is not so great, and it becomes impossible to produce a sound in the veins, in the

normal condition; but if the quantity of the globules falls from 127 to 100, and even still lower to 90, 80, or even to 75, the blood acquires a great quantity of serum, and becomes more aqueous; the diminution of globules is thus compensated by the augmentation of the water, as Andral and Gavarret have demonstrated. In their analyses, the serum is perceived to ascend to 790, 800, or 900, in the 1000. It is to this greater fluidity, that is due the venous murmur. When it is carried to its maximum, it is a true tidal murmur that is heard. It is at times so intense that it has occurred to me, on three different occasions, to hear it at a distance. Imagine how powerful must be a sonorous vibration, in order to pass from the liquid where it is at first produced, into the air, then from this fluid to the ear, with which it is put in unison by the intermediation of the air.

To conclude, then, I assert that each time a bellows murmur is heard, it may be certainly diagnosed; with Andral and Gavarret, that the blood has no longer its normal composition; and that its globules have fallen to 80 or 90. I recognize in this diagnostic sign, one of the most beautiful applications of physical and chemical facts to practical medicine.

The blood, modified as to its quantity, ought to produce likewise the same result. Previous to the labors of Andral and Gavarret, this diminution in the quantity of the blood in anæmia was admitted; it is only since that period, that a diminution in the number of globules merely has been recognized. In spite of the numerous experiments of physiologists, we do not know the quantity of liquid blood contained in the organism; but by considering the smallness of the veins in the anæmia, the decolorized condition of the blood obtained by puncture, and the inconsiderable quantity which is found after death in the sick person who dies, it becomes necessary to ask if there be not a real diminution in the mass of the blood. I am inclined to believe that it is so, in spite of the high authority of Andral. This is not an easy question; for, in this case, the blood would flow with a velocity so much greater, as it would, at the same time, less abundant and less dense.

The bellows-murmur may announce also the diminution of a third element; this element is the albumen, diminishes in a manner protopathic or deuteropathic. When the alteration of the solids forbids the formation of this element, or entails its immediate elimination, the murmur of anæmia becomes apparent. This alteration of the solids exists, for example, in a disease of the kidneys, which removes from the blood its albumen, or of every other organ whose derangements react upon the general health, and forbid the formation of albumen. Moreover, the albumen is perceived to diminish, and to produce the same effect, when blood is lost in large quantity, as in important wounds, in severe parturitions. There is in all these cases, a disappearance of a large portion of the essential elements of the blood, the albumen and the globules; the blood then moistens more thoroughly the walls of the vessels, as in deglobulization. There is perceived, also, according to the old opinions, the diminution of the other elements of the blood, the fibrin and the fatty matters, under the influence of imperfect nutrition, as Bright, Christison, Andral, and others, have perceived. And this is not all — there is still a loss of the inorganic principles, the different salts, the protein bodies, or extractives; in such cases, the murmur becomes the most intense.

If, now, we examine the first causes of anæmia and its murmur, we shall enter upon the study of disease which I designate under the name of inanition. By this is to be understood, not only loss of nutritive matter by reason of deficiency of aliment; there is inanition when the nutrition is impaired by any cause whatever — for example, the altered nervous system prevents the stomach assimilable, for a still stronger reason when the stomach is itself altered, when it is the seat of a cancer or of an ulceration which impedes its functions.

In these cases, there is inanition because the sick person can not recruit his blood with the requisite quantity of necessary material.

Anæmia is, moreover, the result of many other diseases.

It is sufficient that the liver be diseased, in order that the elements essential to the organism be not renewed; the globules then diminish. Biliary calculi, cirrhosis, whatever it be, primitive or consequetive — acepalocysts, even, which at first do not appear able to affect it much; in a word, all that which disturbs the functions of organs, produces anæmia. Amongst such invalids, even when this malady is not suspected, it is necessary to seek for the vibratile thrill and the venous murmur.

You will find them with such intensity that you can not be doubtful. It might be said, for the rest, that every slow and chronic lesion of an organ manifests its development by anæmia.

The spleen is often the source of it, without any doubt. Among leucæmic subjects, who have in their blood two, or even four, white to one red globule, the venous murmurs appear from the commencement, and put the observer upon the track of the malady, before he has even had recourse to percussion. You see, then, how important is the examination of these murmurs; and I have not yet said all, for it is not in general disease, which has for its result a rapid alteration of the blood, that this alteration of the blood becomes often one of the most essential elements of diagnosis.

The alteration of the blood is a constitutional effect of different poisons. In order that the liquid should remain in its natural state, it is necessary that the different principles which flow into it, should not be susceptible of alteration.

It is thus that a subject who does not appear sick, and who comes to consult us about a trifling discomfort, is already profoundly affected. You determine in his case, anæmia; you interrogate him with care, and he informs you that he is a house-painter; you conclude that his blood is altered, perhaps that digestion is not perfectly performed, perhaps that absorption has introduced a poison into his system — the contact of the lead has sufficed to modify his blood, to disturb all the functions of the organism, some feebly, others to a high degree; and, without making an analysis of the blood, you

affirm the fact with certainty. Subsequently, if there is need of it, an analysis of the blood will demonstrate to you that the globules have diminished in quantity. I cite lead; but any other poison happens to produce the same effect, by attacking the blood globules, and either by destroying them or by preventing their formation.

Pellagra, *Ergotism*, which are poisons frequently mortal, alter the blood, and develop anæmia rapidly, in the same manner. Is it necessary to cite to you all the maladies with which you are abundantly familiar, and which are followed by the same effect? I will only specify the rheumatic and gouty diatheses, etc., cancer, and tubercle. It is sufficient that a subject should have the diathesis, in order that, a long time — perhaps ten years — before the least external manifestation appears, he becomes anæmic. A young girl is a prey to the tubercular diathesis, and she may have still the appearance of health; she is only chlorotic. Two years, four years pass, and you commence to suspect a condition more grave. You auscultate with care, and you find the signs of nascent tuberculization; the origin of this evil is with the parents; the diathesis was in its embryonic state, and only exhibited itself by the alteration of the blood.

It is certain that the opinions which we express will meet with determined opposition, because they are associated with thoughts of sadness, and because they touch the heart in its tenderest emotions; but this is a conviction, and I am compelled to declare that the subject has been struck fatally, from its birth, by the diathesis.

These sad thoughts have the merit of making the observer more attentive, and of permitting him to commence the treatment at the moment when he can still rely upon the efficacy of hygiene. Such is its true progress. If a diathesis can determine anæmia in an individual, from the beginning, what will it be when it shall have broken out in all its vigor, and when it shall have developed itself with all its manifestations? The invalid will then become anæmic with a promptness such as will approximate to the state of an individual who has lost

blood, or in whom one of the larger veins has been divided. Two or three days of an acute disease will have accomplished a result at which a chronic disease would have arrived only after a very long time.

Now, there is a sure method of ascertaining the effects produced by this malady upon the entire organism; and I am acquainted with none of them which can determine the venous murmurs so rapidly and so surely as one of these general diseases.

One word, now, upon the subject of the bellows murmur which is met with in an arterio-venous aneurism. This aneurism gives origin, indeed, as surgeons have determined, to the two phenomena which we have studied — to the continuous bellows murmur, duplicated with an intermittent blowing, and to the vibratile thrill. The explanations furnished by authors, of the origin of these murmurs, are scarcely in harmony with the principles adopted by physicists.

When it has been said that this murmur is due to the vibration of the perforated membrane intermediate to the two vessels, and that the passage of the blood from the artery into the veins, suffices to explain the continuous murmur — a greater rapidity of the current during the diastole, explaining also the swell — there has been given an explanation of the phenomenon which is not correct. This explanation is a complete contradiction in physics.

In the memoir which I presented to the Surgical Society in 1852, I sought to demonstrate the true causes of this murmur. There can be, in the transit through the vessel, but two simultaneous sounds, or a single one, a continuous and an intermittent sound.

There can be a continuous sound, only, in a vessel through which the blood passes with sufficient rapidity, and in a continuous manner. This blood ought, as the experiments of physicists has demonstrated, to accomplish a certain distance, to run through a certain space, in order to generate a vibration. These conditions exist in the veins near the heart; the flow of blood into the arteries is remittent; every one knows that

it is subjected to two influences — the systole of the heart, and the tension of the artery; but the murmur is heard only during the cardiac systole, the continuous flow not being sufficiently strong to produce a second: the first one is therefore intermittent.

Thus the blood flows silently during the arterial systole; it flows with a certain murmur during the arterial diastole, because then the range is sufficient. Now, Scarpa has demonstrated that arterial blood can not enter into a vein without arterializing it. It results from this that the vein becomes rigid, and that the blood flows in this vessel of a larger diameter, with thicker walls, and always distended, in a continuous manner. It is the artery which gives out the intermittent sound, and the vein which affords the continuous; these two vessels are found united in the arterio-venous aneurism, and hence the reason why there is heard a continuous-remittent bellows murmur. The intermittent sound is engrafted upon the continuous, as the artery is upon the arterialized vein altered in its walls.

This is clear, and it is not necessary to go to seek in the walls of membranes, vibrations which do not exist, as M. Broca has done, who appears to me to have announced a false theory of the arterio-venous murmur.

I will not give you a longer description of the vibratile thrill, and of the continuous venous murmurs. You have heard these phenomena, and you have studied them in the sick. Moreover, I must dwell upon the operative proceedings which enable them to be recognized. It is not, however, always easy to perceive them clearly, especially if one has not taken care beforehand to place the head of the subject in a suitable position.

Remember the arrangement of the aponeuroses of the neck, and the intimate relations which they sustain to the veins of the region. The costo-pericardiac ligament, as has been noticed by MM. Lannelonge and Ledentio, maintains these vessels in contact with the superior bony rim of the thorax; it prevents its sinking, and preserves a free and easy passage to

the blood which runs through them; it subserves a purely passive purpose. The omo-hyoid aponeurosis, or middle layer, on the contrary, an active part; it is extended, under the influence of the contraction of the scapulo-hyoid — or better still, by the extension of the head; and under the influence of this tension, the vascular walls are kept apart, and thus the circulation is accelerated.

The action of the superficial aponeurosis, relative to the external jugular, is similar. You should, then, in the first place, endeavor to stretch these membranes; and you will affect it easily by turning the head upon the opposite side, and elevating it sufficiently to elongate the muscles of the neck. The subject should be placed in the horizontal position; the erect is bad. If it is desired to observe the vibratile thrill, or the blowing, in all their intensity, the pulp of the finger or the stethoscope should be placed immediately above the right clavicle. Take care, also, in the different examinations made, that the stethoscope is exactly applied. Only very light pressure should be made, and the pulp of the finger should just graze the skin a little, in order to perceive the vibratile thrill. If the compression is too strong, no result will be attained. I will not dwell upon all the details upon which I might still enter. Remember, however, that the vascular signs, even when sought with care, are sometimes difficult to recognize, and are very mobile. They constitute, at the least, two valuable symptoms, which permit the diagnosis of a general disease in its incipiency, and enable it to be studied in its rudimentary state.

It is by similar evidences that we shall be at some time enabled to attain to a recognition of the alterations in the blood, the existence of diathesis, and also to arrest in time the progress of disease by an appropriate hygiene.

We could thus suspect, at an early period, the existence of those organic modifications which, at a later date, we are powerless to arrest.

We can not cure diatheses — we can oppose to them only palliatives. Some day, perhaps, recognized early, we shall be enabled to suspend their evolution.

DELIRIUM TREMENS.

BY P. S. MACDONALD, M. D., CHICAGO, ILL.

In requesting a place in your valuable journal for the insertion of the following case of *delirium tremens*, I do so, not that I can add any thing new to the category of remedial agents recommended in this disease, or enlarge upon the therapeutic value of those I employed; but, being one of no little interest to myself, and from the fact that it was unusually obstinate to the influence of medical treatment, I thought that a brief description of the case might not prove uninteresting to some of your readers, more especially those who had lately entered as co-laborers into the great field of medical practice.

The patient, James Y.; *æt.* 48; by employment a laborer, and a Canadian by birth, had been for some years addicted to drink, and had during that time been on two previous occasions attacked with *delirium tremens*. On the afternoon of September 11th, I was first requested to see him. His wife informed me that a well-known homœopathist of this city had been in attendance on the patient for some time previous to my being called in, and that she had faithfully administered to her unfortunate husband his *pellets* and *dilutions* without any visible effect or benefit.

On examining the patient I found the leading, well-marked symptoms of *delirium tremens*; pulse soft and compressible, beating 95; tongue moist and covered with a thick, creamy fur; pupils normal; gastritis; urine scant and highly colored; much tremor of the hands, and when the tongue was protruded its tremulous condition also gave evidence of the excited state of the nervous system; his bowels operating every few minutes. Expressing my surprise at the rate in which he was discharging the contents of his bowels, his wife at once threw some light on the matter, by acknowledging

that she thought if she could but get the bad whisky cleaned out of him he might get well, and, basing her treatment on the diagnosis she had made, gave him, the day previous, nearly the contents of a box of purgative pills; but the "scouring" did the patient no good—on the contrary, he was worse. I learned at the same time that sleep had not visited his eyes for three nights and four days. In this state of affairs I ordered cold applications to the head, sinapisms to the epigastrium, fomentation of poppy leaves to the abdomen, an enema of beef tea, with *Oleum terebinthinæ* gtt. x., and *Tr. Opii* gtt. xxx., to be given every hour, requesting the *Tr. Opii* to be discontinued in twelve hours, if no tendency to sleep presented itself.

September 12th, 8 A. M.—Found him more restless; no inclination to sleep; pupils contracted; stomach still intolerant to all kinds of liquids and food; his bowels had evacuated but twice since my previous visit; tongue moist and coated with a whitish fur; pulse about 100, weak and compressible; skin clammy; gave the following prescription:

℞.—Sub. Nit. Bismuth, - - - grs. xxv.

Fiat chart, No. X. One to be given every hour, in small quantities of milk punch and beef tea, ordering at the same time a continuation of the enema, but omitting the *Opii*, deeming it unsafe to push the narcotic further, but in its place added *Tr. Assafœtida*, ʒi. Gave an unfavorable prognosis.

September 12th, 7 P. M.—No tendency to sleep; pupils much contracted and eyes injected; his mind constantly employed upon those delusions so common in these cases; tremor of hands and tongue increased; pulse rapid and weak; no dejections from the bowels for the last thirteen hours; the urine voided small in quantity and deeply colored; skin clammy, with a copious perspiration; stomach tolerant of small quantities of beef tea and milk punch. Prescribed as follows:

℞.—Bromide Potass., - - - - - ʒi.
Aqua Distil., - - - - - ʒiij.

Mix. S.—Give a teaspoonful every half hour, requesting a continuation of the enemas of beef tea.

September 13th, 9 A. M.—Still no sleep, and no indications of any; pulse 115, weak and thready; pupils greatly contracted; hands and lower extremities cold and clammy; head and thorax warm; tongue moist and furred; had two evacuations from the bowels since my last visit, and voided his urine twice in the same space of time. I must confess that I was disappointed in not finding the *Bromid. potass.* to have any effect in allaying the excited condition of the nervous system. But the failure ought properly to be attributable to the small quantity of the remedy taken, only four doses, as it could not be continued on account of the irritable condition of the stomach. At this time the general appearance of the patient indicated an approach to collapse, requested warmth to be applied to the lower extremities; an enema of beef tea every hour, to which was added a tablespoonful of brandy; also twenty drops of chloroform every two hours, in some mucillaginous drink, cautioning the nurse to cease giving the latter as soon as any inclination to sleep presented itself.

September 13th, 8 P. M.—On calling at this hour to see the patient, I was grateful to find many of the obnoxious symptoms, if not entirely gone, were much mitigated, and the patient expressed himself as being much better, if he could but sleep; determined that it should be obtained — I resolved to give the anæsthetic more freely, and to remain with the patient and watch the result; I then gave him one teaspoonful of *Choloroform* in *Glycerine*. In a brief period the effect of this dose was perceptible by a lessened frequency and increased force of the heart's action, and in thirty minutes the harassed and prostrated individual sank into a refreshing slumber, from which he did not awaken for five hours.

September 14th, 8 A. M.—Found the patient this morning much improved, with every indication of convalescence, except that an acute pain in the ball of the left eye, and over the superciliary ridge annoyed him considerably. Ordered

cold applications over the seat of pain, which gave temporary relief. Sustaining treatment continued.

September 15th, 8 A. M.—Had a tolerable night's rest; left eye much injected; complains of a sharp, lancinating pain in the organ, with diminished power of vision in the right eye. Cold application, as before, gave transitory relief. Ordered the liberal use of *Quinia* and *Iron* for several days. Under this treatment he convalesced gradually, and would have been able to follow his usual occupation, had not *Iritis* developed itself in the left eye, for which he is now under treatment. The patient asserts that prior to his last attack he never experienced any defect of vision or pain in either of his eyes, and never contracted *Syphilis* or *Gonorrhœa*.

RELATIONS EXISTING BETWEEN THE SENSE OF TOUCH, THE SENSE OF TEMPERATURE, AND THE SENSE OF PAIN.

BY JAMES T. NEWMAN, M. D.

On the 10th of July, 1867, a very singular case came under my observation. Nancy, a negro woman, applied to me for treatment. Upon inquiry into her history, I found that she had been suffering with Hypertrophy of the Heart and persistent Bronchitis. From exposure to cold she became paralyzed, though without loss of consciousness, or deviation of the tongue, when that organ was protruded. The entire right half of the body, including the head, became insensible to pain and to temperature, but there was no loss of motor power. The muscular power, in fact, as measured by the dynamoneter, being greatly increased on the affected side. She could feel the slightest touch on the anæsthetized side, and when the eyes were closed she could discover and pick up a pin from the floor. On washing the hands she could distinctly perceive the shock and movement of the water

flowing over them, but was quite unable to distinguish whether it was hot or cold. In winter she could only perceive the temperature with the left half of the body, and the same when standing near the fire. The normal temperature of the skin on the affected side differed so slight as scarcely to be perceptible. But what is more remarkable, neither the pricks of needles nor pinching of the skin could be felt in the least. She suffered from Neuralgia, in the temporal region, at night. In consultation with Dr. C. F. Hart, he advised me to use the galvanic battery; but prior to using the battery I gave the following prescription for the neuralgic pains:

℞.—Quin. Sulph., - - - - - gr. xxx.
Hyoscyami, ext., - - - gr. xxx.

M. and ft. pil. x., divi. part. decem. S.—Take one night and morning.

Upon the exhibition of this medicine I am happy to say she had no more pains. I then commenced to treat her with electricity. I followed up the use of the battery about two months, and, to my great astonishment, she has recovered the use of her limbs, and the sense of feeling is just as good, apparently, as it ever was.

CORRESPONDENCE.

PHILADELPHIA, *January 11th*, 1868.

Editor Chicago Medical Journal:

In my last letter I gave you an account of an ovarian cyst, operated on by Prof. Wallace, in which he drew off the fluid and injected a solution of *Iodine*. The cyst did not seem to become filled with any fluid for four weeks, when it again commenced to enlarge, and it now has, apparently, about four pints in it, which quantity has been in it for about four weeks.

It has not, therefore, resulted in a *cure*, but it is certain that, thus far, very great relief has been afforded. I now proceed with my series of cases by giving you an account of

Mrs. A.; *æt.* 39. Presented herself at the clinic, with a tumor involving the parotid gland. An incision was made in the form of the letter S. Several small arteries were ligated; the tumor was divested of skin and superficial fascia, and the tumor wrung out with the hand. It involved the entire gland. The external carotid was ligated, and the portio-dura nerve was cut, which will of course produce paralysis of that side of the face. After a few hours the edges of wound were brought together and retained by several interrupted sutures, and a wedge-shaped compress applied. Patient was given a full opiate, and she rested well during the night. The wound was carefully dressed, and healed rapidly; she afterwards presenting herself at the clinic with the wound entirely healed, but with paralysis of right side of face. On examination by the microscope, the tumor was found to be made up of cancer cells.

Francis H.; *æt.* 9. *Case of Ectropia.* Had an abscess in the orbicularis muscle, which was punctured. In addition to this there were four ulcers about the eye, making it a complicated case. A V shaped piece of the conjunctiva was cut out, and the tarsal portion of the lid. The cellular tissue being adherent to the orbit, was loosened, and the attachments were all divided and broken up. The parts were now nicely brought together by delicate thread, and the hair-lip suture. Three weeks subsequently he presented himself with the lid very nearly perfect.

The following case presented itself to Prof. Wallace's "Obstetrical Clinic:"

Mrs. Fanny G.; *æt.* 42. Mother of two children. First noticed her womb "was down" four months ago, when it felt "very sore;" says she "often pushed it up." Examination shows prolapsus of vagina, with procidentia of uterus; a large sloughing ulcer covers the whole os and lips. The perineum has been ruptured, making the recto-vaginal bridge

very limited, and the mouth of vagina very large, admitting with ease a large-sized fist. For three successive examinations, the ulcer was touched freely with *Arg. nit.*, and the uterus replaced, and Monsell's Solution freely applied over surface of vaginal walls, and then a colpeurynter introduced. This was dispensed with now, and the old cicatriced surfaces of the lacerated perineum were freshened with scissors, and then brought together nicely with quilled sutures. After this there was no infiltration of urine and no unpleasant symptom. She was afterwards shown to the class, her perineum firm and entire, and the uterus in good position, with ulcer healed.

Yours, truly, E. R. H.

CHICAGO, *December*, 1867.

Editor Chicago Medical Journal:

B. A., a mulatto girl, came to my office, to be examined. Stout, heavy build, and about 22 years of age.

She stated that she suffered excruciating pains through the bowels, down the inner part of the thighs, to the foot. When one of her paroxysms would come on, which occurred every few minutes, there would be, almost simultaneously with it, a congestion of the saphenous veins; they would become so turgid that one might easily be led to believe it to be phlebitis. This would last probably from three to five minutes, and then disappear almost as suddenly as it had appeared. During the congestion of these veins, she complained of great pain, burning of the vulva and clitoris. This condition of things, I learned had been the case for six or eight months. The nates were so tender that she could not sit, with any degree of comfort, even on a soft seat; and then, only for a few minutes. The menses had been suppressed for eight months, during which time the bowels had been constipated, so much so that there was no action of them, except by artificial means. Leucorrhœa had been very profuse, with headache and loss of appetite. In micturition, the pain was

almost unendurable — represented by her as if there was something obstructing the flow of urine, and feeling as if the parts were on fire. She said she had been under the treatment of several physicians, but they had given her neither relief nor satisfaction, as to what was the matter with her, or if she could be relieved.

Upon an examination, I found the parts much inflamed, tumefied and hot; the clitoris from two to two and a half inches in length, and quite as large as a man's thumb, very red, dry, hot, and obstructing the entrance to the vagina so that it was difficult to introduce even the finger. I tried several times to effect an introduction of the speculum; but the parts were so tender, and the clitoris so long and large, that it was impossible.

She was directed to use a wash three times a day, composed of *Cupri sulphat.* ʒj., to *Aquæ puræ*, Oj.; then dry the parts well with a soft towel or cloth, and dust with powdered starch. For the constipation and suppression, she was directed *Aloes soc.*, grs. xx.; extract *Nux vomica*, grs. v.; make in pills, xx. S. one morning, noon and night; and go to stool every morning, at a certain hour, whether there was a desire to defecate or not.

I have never seen the case since but once, and then only to meet her on the street; but have learned, through others, that the treatment succeeded well. She commenced improving from the time she first used the wash; the pains all left; there was a rapid restoration of the clitoris to its normal condition and size; the bowels soon became regular, and the menstrual flow was reëstablished; also her general health.

JAMES T. NEWMAN, M.D.

SHEBOYGAN FALLS, WIS., *December 20th*, 1867.

Editor Chicago Medical Journal:

I am requested by the Medical Association of this county, to inform you that a Medical Society was organized August

19th, 1867, entitled the Sheboygan County Medical Association. Its officers are as follows:

President, Dr. Louis Bock, of Sheboygan; Vice President, Dr. H. J. Young, of Sheboygan Falls; Recording Secretary, Almon Clarke, of Sheboygan Falls; Corresponding Secretary, W. B. Huson, of Sheboygan Falls; Treasurer, A. F. St.Sure, of Sheboygan. Censors, Henry Bodenstab, of Howard's Grove; J. N. O'Brien, of Plymouth; W. B. Huson, of Sheboygan Falls.

Its remaining members are: L. D. McIntosh, of Sheboygan; Fred. Hahn, of Sheboygan; W. D. Morehouse, of Plymouth; G. B. Shepard, of Sheboygan Falls; and J. J. Brown, of Sheboygan.

Yours very truly,

W. B. HUSON, Cor. Sec'y.

EDITORIAL.

EDITORIAL.—*Several articles crowded out of this number by pressure of other matter.*

BACK NOS. WANTED.—*Owing to the large increase in our subscription list, although it was supposed a sufficient number of copies had been provided, we are entirely out of copies of the* JOURNAL *for the months of* JANUARY, JUNE, SEPTEMBER, OCTOBER, *and* NOVEMBER, 1867, *Vol.* XXIV. *We will pay twenty-five cents each for copies of either of these, in cash or by credit on the present volume, as desired. Will our friends who do not file their numbers oblige us by responding?*

OVARIOTOMY.—It is somewhat noteworthy that in the cases of abdominal section we read or hear of, the successful ones are those which skilled and intelligent practitioners have given a grave prognosis upon — the unsuccessful have been those in which all have agreed that, if ever, all circumstances favored the operation. The presumed (or assumed) skill of the operator seems to have little to do with the result. The

secret of this discrepancy would appear to be coming out in this wise: *The greater the departure of the peritoneum from its normal condition, the less the danger of interfering with it.* It will hence occur that the *adhesions* so much written and talked about, involving loss of mobility of the tumor; long continuance of pressure; frequent resort to paracentesis, etc., so far from discouraging the operation are rather promotive of confidence in its success. Should this idea become general, it would relieve the professional mind of extreme anxiety, and at the same time give confidence in the employment of measures for temporary relief. Paracentesis is not as dangerous as the long section — meanwhile the patient may be kept in a condition of comparative comfort for years. (We know, personally, of one case, which was tapped at gradually decreasing intervals for over *seventeen* years.) And then the operation may be attempted, as a *dernier resort*, with even better hopes of successful issue.

LOOT.

Dr. Wayne Griswold recommends (*Western Journal of Medicine*) in Scarlatina *Quinine*, *Iron*, and *Chlorate of potash*, with good nourishment, as the central measures of treatment. He prefers warm ablutions to cold, and gives for drink lemonade, ice water, or milk. Locally, to the throat:

℞.—Tinct. Ferri Chlor., - - - - - ʒ iij.
Potassæ Chlorat, - - - - - - ʒ j.
Aq. Distill., - - - - - - ʒ iij.

M. Apply them three times a day.

The same mixture, internally, in doses of a teaspoonful or more every four hours, alternating with moderate doses of *Quinine*. Free ventilation is insisted upon. For the Sequelæ

he advises: Free doses of *Jalap* and *Hyd. cu. cret.*, followed by *Bitart. potash*, with half a teaspoonful of the following mixture every four hours:

℞.—Fl. ext. uva ursi, - - - - - ℥vij.
Fl. ext. digitalis, - - - - - ℥j.
Sp. nit. dul., - - - - - - ℥j.

M. Also warm ablutions.

On removal of the œdema and increase of urine., *Quinia* and *Iron* to be given in tonic doses.

A New York correspondent of the same journal writes: "At the New York Hospital and in Bellevue, the *hypodermic injection of Quinia* is used quite extensively in the treatment of Intermittent Fever and Malarial Neuralgia. At the former institution, the formula used is as follows: Take of *Sulphate of quinia*, 60 grs.; *Dilute sulphuric acid*, 40 minims; *Distilled water*, 1 fluid ounce. Mix. Make a solution, and filter with the greatest care. Thirty-five minims are equal to 4 grains of *Quinia*. Or the solution may be varied by the addition of 4 or 6 grs. of *Sulphate of morphia*. This combination renders the injection less painful." At Bellevue, an ethereal solution of *Quinia* is used, of the strength of 1 grain to 2 minims. The process of preparation is quite elaborate, and it is difficult to see where it possesses especial advantages over that of the New York Hospital, as, indeed, it is difficult to see where that possesses any real advantages over the usual methods of administration of the remedy, except in so far as it may enlist the expectant faith of the patient, which is always of great use to the physician. This latter may overcome the patient's alarm and annoyance—and subsequent liability to abscesses or erysipelas.

Beef soup, broths, or jellies, may be preserved from turning sour in the sick room, or elsewhere, by stirring in a few drops of the solution of *Bi-sulphite of lime*. This will not impair their taste in the least.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—FEBRUARY 1, 1868.—*No.* 3.

INTERNATIONAL MEDICAL CONGRESS.*

CONVENED AT PARIS, AUGUST 16, 1867.

TRANSLATED EXPRESSLY FOR THE JOURNAL BY PROF. FREER.

A MALADY may be contagious and virulent, without being transmissible by inoculation under the skin. Inoculate as much as you will the virus of Gonorrhœa, that of contagious Ophthalmia, and you will obtain nothing. Apply them upon a mucous surface, and you will have an affection which offers the same lesions, and which will reproduce the same virus. It is the same with Cholera. M. Roltenkofer, (of Munich), has demonstrated that Cholera is contagious, and that the virus exists in the excrementitious matters. He has cited in its support a large number of facts, collected with care. However, I do not coincide with all the ideas of the Munich school, yet I must admit that they have perfectly demonstrated the point of departure of the contagious principle of Cholera. I have, besides, for my part, observed facts so striking that in their presence it appears to me impossible not to admit the contagiousness of Cholera. The first man attacked with Cholera, who was carried to the Hospital Saint

* Continued from page 18.

Pierre, of Bruxelles, the past year, was placed in a ward by himself, and, as he had no one to watch with him, a robust patient, affected with Chronic Eczema, otherwise perfectly well, to assume this task. This man accepted the task, and passed the night near the patient. The latter recovered; but his guardian contracted the disease, from which he died forty-eight hours after.

In a village two or three leagues from Bruxelles, Cholera did not exist, until a woman came from Bruxelles to visit her daughter; this woman was attacked, and passed it to her child. The doctor of the vicinity — very short sighted, having forgotten his eye glasses — brought the night vessel very close, in order to examine the dejections. Two or three days later, I was summoned by telegraph to render assistance to my confrère. I departed at once; but on my arrival he was already dead of Cholera. At Anderlecht, a village touching Bruxelles, I have been able to follow the march of Cholera from hamlet to hamlet, carried by infected individuals. Besides, experience proves the contagiousness of Cholera. Among animals, the dog is very liable to contract the disease. Cause these animals to swallow the dejections of Cholera, and they will present the usual phenomena of the disease. I have seen one die in twenty-two hours, having had the characteristic discharges, and the usual anatomical lesions of Cholera.

As I have said, it is necessary to take into account, (in the appreciation of the phenomena of contagion), of the matter which is the vehicle, and of the mode of transmission. I do not believe it is transmissible by inoculation, but it is positively by penetration into the buccal and nasal cavities, from the emanations rising from the excreta.

Although I believe in the contagiousness of Cholera, yet I am no partisan of quarantine. I consider it inefficacious, and I do not like the necessary restrictions which are imposed upon commerce and circulation.

Hygienic measures and the immediate disinfection of the dejections, which are the vehicles of the poison, are, accord-

ing to my belief, the principal prophylactic measures to make use of with advantage.

M. Marcowitz.—I would not permit myself to speak upon a subject so vast as Cholera, if I had not been appointed the past year by my Government an inspector of the districts that were being ravaged by this terrible malady, with instructions to make use of all known efficacious measures for combating and preventing the propagation of the disease.

I can not partake of the opinion of M. Shrimpton, upon the non-contagion of Cholera, and without wishing to recall all the proofs which the experience of the past year have furnished, (and of which one may find a large number in the annual dictionary of Dr. Garnier), I may be permitted to remind Dr. Shrimpton that his illustrious compatriot Graves, of Dublin — a long time since — has perfectly established that Cholera has constantly followed in its march the great maritime routes, and had generally appeared in ports where vessels were anchored, from infected places.

The Cholera of the past year has followed, absolutely, the same march. It is thus that it has touched the landings of the lower Rhine, and finished by penetrating the interior of the United Principalities, and following constantly the valleys of the great rivers and the great thoroughfares of communication by land.

A virulent malady may be fatally contagious by inoculation, and eventually contagious by infection. I will not examine here if the contagiousness of infectious maladies in general, and cholera in particular, depends upon the greater intensity of the poison at such and such epochs, or if the poison, being constantly the same cosmic causes, and certain individual conditions can imprint upon it an unaccustomed violence, and render propagation more facile. But that which I will earnestly proclaim is, that cholera demands certain conditions, in order to a great intensity of development. The principal is want and misery. I have constantly observed that the unfortunate portion of the population are those who are almost exclusively struck with the

malady. At Bucharest, where the cholera has raged with moderate intensity, it has always been respectful of the class in easy circumstances, and I have constantly left them ignorant of its existence or prevalence, and, at the same time, twenty-five or thirty individuals were dying daily. At Jassy, when I arrived, there were one hundred and fifty dying per day. The medical commission, to which I had the honor of belonging, had already ordained, among other measures, to compel the pauper Jews to remove outside the city, whose slovenliness and disposition to agglomerate rendered them a real focus of infection. This measure, loosely executed, had given insignificant results. With a little energy on my part, and by the aid of much good-will on the part of the Israelitish community, whose sacrifices on this occasion are above all praise, I had succeeded in removing about four thousand, which were lodged in barracks upon the heights of a neighbouring hill, in the best possible condition for perfect æration.

This simple measure had the effect of reducing the mortality to thirty per day. I will not discourse of other measures, such as special hospitals, domiciliary visits, etc., which, incompletely executed, gave but insignificant results.

M. Bonnet, of Bordeaux, regarded quarantines as of great utility, but repelled sanitary *cordons* and all the measures that we might be able to take in order to the prevention of the migration of morbid miasms—miasms in which he did not believe. He counseled, above all, hygienic measures, such as frequent currents of air, the dissemination of the population, and the abandonment of infected districts by all those who can do so without too much inconvenience; the use of *Chlorine*, the disinfection of cess-pools, sobriety, abstinence from fruits green or stale, moderate exercise, a calm spirit, and agreeable distractions, etc.

I have spoken, in order to expose very briefly, how, as a partizan of contagion, when I went to fulfill a mission at the time of the prevalence of cholera in Egypt, I, as well as my colleagues, returned with quite different opinions on this

subject. Not but that I believe in contagion, properly so called, that which follows contact, and which one observes in those maladies where the cutaneous secretions are charged with the morbid germs.

I recall that I have made, after many others, an experiment, consisting in enveloping myself, during many nights, in covers that had imbibed the perspiration of those affected with cholera, and that I did not contract the disease. Upon this point, my opinions are well established, and the subject seems to me of great importance, for those attacked with transmissible affections by contact, inspire fright among those who surround them, and are liable to be abandoned, not by the physicians, it is true, but by those who have not assumed the obligations of our calling.

But those who have not this mission, who are not ordinarily accustomed to death-scenes—parents, friends, domestics, all fly. Now, there are not, in either country or city, physicians enough to act in the double capacity of doctor and nurse. When maladies are transmissible otherwise than by contact, the danger seems more distant, and self-love less demonstrative also, the sick are more cared for.

Cholera seems transmissible in this manner. M. Shrimpton has said that a disease, in order to be transmissible, should have a primary period of incubation. Cholera, in effect, has this period. When a vessel puts into an infected port, and if it receives passengers, we often remark that the passengers become choleric many days after embarking. We saw this ourselves on our way to Egypt. The cholera still raged at Malta; we stopped there; a Maltese took passage on our ship, and three days after he died with cholera. Soon other cases declared themselves. We had had seven two days after, when we debarked at Alexandria.

Those who admit that the choleric miasms are carried by the wind, would they contend that in like cases the ship had entered a special current of this kind? But why should the passengers, who came from the city where the epidemic

reigned, be the first attacked? It is necessary to admit, in explanation, a period of incubation longer or shorter.

The transmission of cholera by individuals, and above all by sailors, has appeared to us more evident in Egypt, where the disease was not mitigated as in Paris.

Almost always one has been able to verify that the invasion of the malady has coincided with the arrival, either of pilgrims from Mecca, or of travelers who have been subjected to its influences in the countries through which they came.

UTERINE DISPLACEMENTS.

BY L. A. BABCOCK, M.D., FREEPORT, ILL.

DISPLACEMENTS of the Uterus are of three kinds, viz.: PROLAPSUS, RETROVERSION, and ANTEVERSION. The uterus occupies normally very nearly a central position in the pelvis, being, perhaps, a little nearer to the sacrum than to the pubis, its long axis should stand at about right angles to that of the vagina, the fundus pointing in the direction of the umbilicus, and the os tincæ towards the end of the coccyx. Prolapsus signifies a sinking of the uterus below its normal position, and sometimes it sinks nearly or quite down to the os externum; when it protrudes beyond the vulva, it is called procidentia uteri. The fundus may be tilted a little one way or the other without the position being necessarily abnormal. The condition and contents of the bladder and rectum may temporarily influence it to some extent.

If it turns forwards or backwards for 25 degrees or 30 degrees, it does not amount to malposition, but if to 40 degrees in either direction, without soon rectifying itself, it is abnormal, and usually goes from bad to worse, till the malposition becomes persistent. If the uterus fall backward in a line drawn from the os to the promontory of the sacrum, it will describe an angle of 45 degrees, and will present its broadest surface to the pressure of the superincumbent viscera, which will necessarily force it eventually lower and lower; and if it turned forward to the same extent, the same power exerted on its broad posterior surface, necessarily increases this abnor-

mal tendency, But an anteversion never goes relatively to so great an extent as a retroversion, simply because it meets with more resistance. Anteversion often stops at 45 degrees, but may go to 90 degrees, as when we have a complete version, with the whole organ lying flatly down on the entire wall of the vagina, and parallel with it, while a retroversion seldom or never stops under 90 degrees, and often goes to 135 degrees, simply because there is less opposition to its downward progress. It then follows that if the fundus of the uterus is found constantly lying just behind or even near the symphysis pubis, it is an anteversion, but if it is found lying persistently back under the promontory of the sacrum, it is a retroversion.

Some practitioners are skeptical as to the injurious consequences which result from these several displacements of the uterus. The patients complain both of local pain and constitutional suffering, while they obstinately refuse to be comforted by the assertion that it is all "hysteria." But an experience of thirty years in the practice of medicine has convinced me that a displacement of the uterus, is just as much an abnormal occurrence as is the dislocation of a joint.

To say that the pain and other symptoms which accompany uterine displacements are simply due to congestion or inflammation, must lead to a course of treatment as absurd and mischievous as if a dislocated humerus or femur were to be treated by leechings and alterative drugs without attempting reduction.

If the profession would turn to be moral reformers, and try to correct some of the great evils of society, they might lecture to women on their bad habit of tight lacing, which tends to force the bowels down into the pelvic cavity, and is a very prolific source of prolapsus. But another and more degrading custom is the habitual use of periodical pills and drugs, to prevent conception, which, more than anything else I know of, tends to produce displacement and leucorrhœa.

But the profession have to deal with facts as they exist. We have to diagnose a case from its history and present condition, without looking back to our grandmothers to see what diseases they may, or may not have had, in a former age of prudence, purity, and virtue.

To treat successfully these several displacements, surgical appliances must be adapted for rectifying the malpositions of the womb, and for its retention as nearly as possible in its normal position.

The womb must be restored to its normal position in the pelvis, and then it must be held there by an instrument that does not irritate the cervex or vagina, nor rest upon the perineum for its support. And the instrument must be small and light, and of a non-irritating substance, of silver or gold, so that its galvanic power will tone and strengthen the enervated uterine organs. Astringent injections do no good, and caustics decided harm. And as to rubber, and glass pessaries — either globe, horseshoe, or any other shape — when they are to be crammed into the vagina, with no base external to support them, must, of necessity, increase the irritation and make the condition worse.

A surgeon might as well cram a load of hay into the vagina to support the uterus in prolapsus as a rubber pessary, and with as good a chance of success, for both would cause irritation and leucorrhœa, and to blow up a wind bag in the vagina is more ridiculous.

What can be more humiliating to the student than to look over the different shaped instruments that have been used in the treatment of uterine displacements, and yet, teachers of medicine still urge the use of these worthless rubber and glass pessaries that expand the vagina, and prevent its contractions to support the uterus, resting upon the perineum for its support, causing constipation and leucorrhœa, and a train of evils worse than displacement itself. And even when a stem pessary is used, many still cling to the old fogy idea of a rubber with a harness as appropriate as an ox yoke would be, or a hay rack, with all its projecting points, or still worse, a stem pessary "elevator," supported by straps that close up the anus and urethra, so that it has to be taken off whenever there is a movement of the bowels, or micturition, the very time the support is most needed.

The instrument I use consists of a silver cup, made to nicely fit the neck of the womb, attached to a hollow curved silver stem, which fits closely to a silver handle, dividing in a curve over the vulva and os pubis, and is fastened and held firmly in its place by a belt around the body above the pelvis. When this instrument is properly adjusted, the patient can walk, sit, or work with perfect ease, as it does not touch the bowels, nor urethra; micturition is not impeded, nor is the vagina expanded or irritated, for there is not a joint, rough or uneven place in the instrument, it all being polished silver, it will not corrode, and is so light that it is worn with comfort. And the

silver itself tends to tone the organ, and is the only metal that can properly be used in such instruments.

Any physician who wishes to try one of these instruments, can have one at the actual cost of manufacture, by addressing me as per above.

DISLOCATION OF METATARSAL BONES.

BY H. K. PALMER, M.D., SPRINGFIELD, ILL.

I AM induced to give an account of the following case, simply as one which may be worthy of record, from its being so seldom that such injuries are met with.

August 30th, 1867, I was called to see Mr. Jones, who, it was said, had had both feet crushed.

Dr. A. A. Shutt being in the office at the time, I requested that he accompany me, which he did.

We arrived at the house as they were removing him from the wagon, in which he had been brought from the coal-mine where the accident happened, to bed.

The history, as given by his friends and himself, is as follows: He was standing on a piece of timber, about a foot square, the forward part of the feet resting on the sill, the heel projecting over, lifting, with several others, a derrick, which was being raised by block and tackle, and, by the breaking of a rope, the whole weight was left on the knees of the men, all escaping but Jones, who was caught by it slipping from his knees downward, catching his feet, driving down the tarsal bones.

On examination, the metatarsal bones of the left foot were found to be displaced upwards and a little outwards, lapping over the tarsal bones *nearly an inch.*

Those of the right foot were also displaced, except the fifth, and in that the separation was not so entire as in the other. Dr. S. being also satisfied that we were correct in our diagnosis, gave *Chloroform*, and grasping the left ankle in

one hand, and the foot in the other, using all my strength, the parts were reduced with a loud snap, heard by all in the room. The same plan followed with the other, giving a strong inward twist, met with a like result, all deformity disappearing from both feet.

Bandages and a pad to the insteps were applied, and cold water used freely for five or six days, no bad symptoms following. Is now (January 1st, 1868) at work, wearing a shoe padded in the instep.

LIGATION OF INNOMINATE ARTERY.—A SUGGESTION.

BY MOSES GUNN, M.D., PROF. SURGERY RUSH MED. COL.

The full recovery of a patient, after ligation of the unnamed vessel, which occurred in New Orleans two or three years since has inspired a hope of the operation which for a long time past had ceased to exist as a general sentiment. But even in that successful case, the patient was in imminent danger from secondary hæmorrhage, which must ever menace the operation of *firm* ligature of the vessel.

It is not probable that the operation will be required for any thing, save the cure of aneurism; and for this, *complete* arrest of the current of circulation is not necessary. I therefore suggest the application of a silver ligature to the vessel for the purpose of *constricting*, but not completely *occluding* it. The vessel should be constricted to about the size of the radial artery. By such application there would be no strangulation of the included portion of the walls; and the metallic ligature would not be likely to excite ulceration. The ligature should be cut short and the wound closed accurately. By this procedure we should probably be able to obtain perfect healing of the wound before the usual period for secondary

hæmorrhage. It is not probable, either, that that secondary hæmorrage would occur, even though the wound was not healed. I shall put the plan on trial should opportunity offer.

FOREIGN CORRESPONDENCE.

PARIS, *January 2d*, 1868.

Editor Chicago Medical Journal:

IT is well known that the conditions favorable for healing of wounds by adhesion and union by the first intention are, clean surfaces, unimpaired vitality, entire cessation of bleeding, perfect coaptation, exclusion of air, light dressing, and only a very slight grade of inflammatory process. One of these conditions, *exclusion of air*, is attracting at present the attention of the medical profession in this country. Dr. Guérin has communicated on this subject to the Academy of Sciences a most interesting paper, in which he advocates the use of an instrument he has invented with the object of obtaining the pneumatic occlusion of the parts undergoing the process of healing. By means of this instrument, open wounds are placed in the same conditions as sub-cutaneous wounds. The apparatus is so constructed as to effect the double purpose of excluding the air, and absorbing the secretions from the parts under treatment. The importance of this method may be judged by the admirable results attained. Pneumatic occlusion has heretofore been applied to four kinds of open wounds. In the first category are comprised tegumentary wounds, and simple surgical operations—that is to say, those which go no deeper than the skin, and the cellular tissue — incisions, section of cicatritial bands, excisions of sub-cutaneous tumors, and extractions of extraneous bodies from articulations. Among the cases mentioned by the author, I will notice that of the extraction of hydatiform

concretions of the wrist. By ordinary means, this operation is generally considered as one of the most dangerous in surgery. The patient, a wine-dealer at Vesinet, had been, at several times, under the care of Drs. Velpeau, Nelaton, and Langier. Dr. Guérin performed the operation in presence of several surgeons. On the fourth day the wound was completely healed. The tumor having reappeared six weeks after, owing to several granulations which had been overlooked, the operation had to be renewed. Four days after, the new wound was entirely healed. No accident, nor any symptoms of suppurative inflammation were observed.

To the second category belong grave operations, such as amputation of limbs. One of these operations, performed by Dr. Maisonneuve on a patient who died of cholera a few days after, has showed, upon dissection of the stump, a singular result, and an additional advantage produced by pneumatic occlusion. When the operation was being gone through, Dr. Guérin requested the operator not to tie the arteries, but simply to bend them together with the stump, he having found, by experimenting on animals, that the obliterations of the arteries could be produced by adopting that method. On the fifteenth day subsequently to the operation, the patient having died of cholera, the autopsy revealed the fact, that both the radial and cubital arteries were entirely obliterated. The anxiety felt by Dr. Guérin to get rid of all kinds of extraneous bodies, including ligatures, from wounds submitted to pneumatic occlusion, had led him to employ this method that seems destined to do away with the ligature, which constitutes, in all operations, a most serious complication.

In the third category, we find contused wounds with abrasion of the skin, complicated fractures, and simple ones—that is to say, accompanied with perforation of the integument, the bones simply broken. Our author mentions the case, amongst others, of a child suffering from a complicated fracture of the fore-arm, the fragments of the radius protruding through an opening in the integument. On the third day

the cutaneous wound was entirely closed, the consolidation of the fracture took place just as in a simple fracture.

The last category comprises wounds by firearms, with laceration and destruction of the tissues, comminuted fractures and crushing of the bones, wounds which present the gravest complications of traumatic lesions. "On the 28th of August, 1865," says the doctor, "I was called at Reims, by a telegraphic despatch, to see a merchant who was suffering from the laceration of the palm of one of his hands, caused by the explosion of a cartridge. The shot, penetrating the hand, had bruised the flesh, cut the arteries, lacerated the nerves and tendons, and produced a comminuted fracture of the bones. The tattered and shrunken skin gave a full view of the articulations, and the hand, as a whole, presented but a mass without shape, in which the swollen and torn fingers were hardly distinguished. After the first care given by the professors of the medical school at Reims, the ligature of the arteries having been performed, the wound cleansed, and fifteen sutures done, the hand, covered with a suitable bandage, was introduced in the apparatus, which was then placed in connection with the pneumatic receiver at sixty-five degrees. No sooner had the operation, which lasted three hours, come to an end, than the patient fell asleep, and rested till seven o'clock the next morning. On awaking, he was calm, had not felt at all feverish, his hand was but moderately sensitive. Pneumatic occlusion was still carried on by Drs. Gallier and Stappart. I saw the patient eight days after the accident; he had suffered no feverish attack, no traumatic accident whatever, the dead portions of the flesh, the excreted liquids had passed through the pneumatic receiver, and granulations were springing up. On the fourth week, the wound was filled up, and on a level with the surface of the hand. The thirty-fifth day it was completely cicatricized, presenting no traces but the lines marking the points of the union between the parts. Five months after, the healed man was presented to the Academy of Medicine, and every one there acknow-

ledged that the hand looked like a natural one, the cicatrix offered the appearances of natural skin."

These facts suffice to place in evidence the physiological properties, and the practical advantages of pneumatic occlusion applied to the treatment of open wounds. In a few words, in the most normal conditions this method produces cicatrization without traumatic or symptomatic fever, without any suppurative inflammation, brings about immediate re-organization. In less favorable conditions, as when the wound has been open for some time, or when it contains extraneous substances, or when, again, it is complicated with former morbid states, pneumatic occlusion can not prevent a certain degree of suppurative inflammation, but continued aspiration effectually arrests all accidents resulting from the putrefaction and resorption of the altered liquids. At all events, the method proposed by Dr. Guérin favors and renders more rapid the cicatrization or consecutive organization of the wounds.

Practitioners are well aware that *Cod-liver Oil*, which has now become an important element in Materia Medica, unfortunately possesses a taste, the repugnance to which many patients can not overcome. Dr. Roland has endeavored, and not, it seems, without success, to remove this obstacle by riding the oil of its characteristic taste. His receipt is as follows: *Cod liver Oil*, 100 grammes (21 drachms); *Alcohol*, at forty degrees of Baume's areometer, 60 grammes (12½ drachms); *Essence of Peppermint*, 3 grammes (45 grains). By mixing these ingredients, an emulsion is formed, which is administered at the dose of three table-spoonsfull a-day. The proportion of these ingredients may be varied according to the taste of the patient. Dr. Roland states that he has obtained very satisfactory results from this mixture.

W.

[We find (*Reporter*, January 11) since the receipt of the foregoing letter, a description of two forms of apparatus sug-

gested for the occlusion of wounds from the air, in the manner described by our correspondent.—Ed.]

M. Guérin, and M. Maisonneuve, have each submitted to the Academy of Sciences an instrument for the protection of wounds from the action of air. The object proposed by M. Guérin, is to reduce exposed wounds to the condition of subcutaneous wounds, so as to obtain union by first intention. The apparatus consists in a hemispheric glass balloon, with three tubulated orifices. One of these communicates with a manometer, which indicates the degree of vacuum established in the globe. The second communicates with the patient; the third with a central reservoir of vacuum, to which all the individual apparatus in a ward may be attached.

The manometer consists of a barometric tube, and a glass globe communicating with it, and both contain mercury. The globe is plunged in the hemisphere before-mentioned. When the air is exhausted from the hemisphere, the mercury falls in the tube and the globe. By means of this apparatus the wound is in contact with a vacuum instead of air, and at the same time aspiration is continually exerted on the fluids exuding on it surface.

M. Maisonneuve's apparatus is more especially designed to meet this latter indication. An india-rubber cap, furnished with a tube, is placed over a wound (especially a stump after amputation). The tube is in communication with a flask, that, by means of another tube, is connected with an air-pump. This exhausts at once the flask and the cap, and the latter collapses, and, pressed by the air against the surface of the wound, affords it the most complete protection. At the same time the fluids are incessantly drawn off into the flask.

BOOK NOTICES.

On the Signs and Diseases of Pregnancy. By Thomas Hawkes Tanner, M.D., F.L.S., etc. From the Second and Enlarged London Edition. With Four Colored Plates, and Illustrations on Wood. Philadelphia: Henry C. Lea. 1868. Pp. 490.

The imprint of this well-known publisher is almost of itself the guarantee of a good book, and when to it add the name of an author so eminent as is Dr. Tanner, it is about unnecessary to use language of commendation.

The JOURNAL thinks, however, that this is the best book which has thus far appeared on these important subjects. Clear, concise, practical, and to the point—we take unusual pleasure in commending it to our readers.

THE TREATMENT OF DISEASES OF THE THROAT AND LUNGS BY INHALATIONS, with a New Inhaling Apparatus. By EMIL SIEGLE, M.D. Translated from the Second German Edition by S. Nickles, M.D., Cincinnati. R. W. Carroll & Co., Publishers. 1868. Pp. Price $1.25. Sent to any part of the United States.

This is a very interesting and valuable little book, which should be read by all those who are employing "pulverized fluids" in the treatment of affections of the air passages. Its practical suggestions are given in a lucid and rational manner. We are especially pleased by perusal of the sections on membranous croup, whooping-cough, and phthisis pulmonalis. In the latter affection, the author recognizes the prime importance of attention to hygiene and nutrition, but considers inhalations valuable adjuvants in relieving subordinate symptoms.

PLASTICS. A New Classification and a Brief Exposition of Plastic Surgery. A Reprint from a Report in the Transactions of the Illinois State Medical Society. By DAVID PRINCE, M.D. Philadelphia: Lindsay & Blakiston.

CHRONIC DISEASES OF THE LARYNX, with Special Reference to Laryngoscopic Diagnosis and Local Therapeutics. By Dr. ADELBERT TOBOLD, Lecturer in the University of Berlin. Translated from the German, and edited by GEORGE M. BEARD, A.M., M.D., Lecturer on Nervous Diseases in the University of New York. With an Introduction on

the History and Art of Laryngoscopy, etc., etc., by the Editor. Illustrated by 44 engravings on wood. New York: Wm. Wood & Co, 61 Walker Street; London: Robert Hardwicke. 1868.

CONDIE ON DISEASES OF CHILDREN.—The sixth revised and enlarged edition was announced on page 23 of the JOURNAL. It may well be said that the great aim of the author "to present a complete and faithful exposition of the pathology and therapeutics of the maladies incident to the earlier stages of existence" has been faithfully followed up. Whilst upon some points the therapeutics of the book do not quite suit us, the pathology is mainly up to the times. We shall take an early opportunity to set forth, especially, our objections to the management of Diphtheria recommended. We are fully of the opinion that the plan of this author can not be endorsed by the profession of the North-west.

EDITORIAL.

BACK NOS. WANTED.—*Owing to the large increase in our subscription list, although it was supposed a sufficient number of copies had been provided, we are entirely out of copies of the* JOURNAL *for the months of* JANUARY, JUNE, SEPTEMBER, OCTOBER, *and* NOVEMBER, 1867, *Vol.* XXIV. *We will pay twenty-five cents each for copies of either of these, in cash or by credit on the present volume, as desired. Will our friends who do not file their numbers oblige us by responding?*

Commencement R. M. C.

The exercises of the Twenty-Fifth Annual Commencement of Rush Medical College will take place on Wednesday the 6th inst., at the lower lecture-room of the College, at half-past 7 o'clock, p. m.

The Valedictory Address will be pronounced by Prof. R. L. Rea. Diplomas will be awarded to the largest graduating class in the history of the Institution. The profession are cordially invited to be present.

Carson's Synopsis of

Materia Medica, and Bouchardat's Annual Abstract for 1867, received too late for notice in the present No.

Anatomical Specimens, etc.

Particular attention is suggested to the advertisement of Messrs. Hovey & Nichols on our advertising sheet. Their establishment is literally a *palace of art*, and one of the established "lions" of the city. A long acquaintance with the senior partner, and the high reputation of Mr. N., enable us to recommend the firm as entitled to entire confidence, and every way worthy the patronage of the profession. No physician visiting the city should fail to call upon them; and whether he purchases any thing or not, at least gladden his eyes by looking at things of beauty, which are joys for ever.

LOOT.

Dr. McGraw, Surgeon of Harper Hospital, calls attention (*Detroit Review*,) to the evils arising from attempts at removing, by cathartics, the constipation so frequently following severe surgical operations. He is in the habit, in such cases, of deferring all attempts to move the bowels until the cause of the constipation, the *excessive irritation of the nervous system*, has passed away. In cases where cathartics had been tried in vain he has succeeded in procuring passages by the administration of *Morphine* in large doses. In one case of the kind he reports securing free evacuations by hypodermic

injection of half a grain of *Morphia*—the part selected being the skin of the abdomen. The constipations and diarrhœas of the army, he is convinced, were oftener the subjects of mal practice on the part of men in good standing in the profession, than almost any other class of diseases. Sensible and true.

Dr. Chase (*St. Louis M. Rep.*,) suggests in *Stomatitis Materna*, that it is not in *every* case dependent on impoverished blood, but may be the result of temporary indigestion; or of an irritation of the stomach produced by some article of food disagreeing with that organ, or else the effect of some medicinal substance taken purposely or by accident. If constitutional in cause, of course local remedies will fail. He observes:

"There should be a *nourishing diet* immediately prescribed, consisting of plain and simply cooked food which has not been robbed of any of its elements of nutrition. At the risk of being tedious, I would name unbolted wheat meal, lean beef and mutton, garden roots, fruits, etc.; also light native wines, and lager beer. I would prohibit fine flour, pork, salted meats, smoked fish, corn starch, pastry and confections, excepting simple fruit jellies, unspiced. There should be moderate exercise, fresh air, sunlight in abundance, daily tepid baths, and any other common sense hygienic measures that may suggest themselves.

Medicinal treatment may consist in the exhibition of small doses of mercury, quinine, rhubarb, nitiric, muriatic, and sulphuric acids, or of citric acid. Arsenic also in small doses is very beneficial. Only *one* medicine at a time should be given, and it should be continued at least a week without change, if we would observe its effects. I think the acids will be found most beneficial where there have been mal-nutrition and starvation; mercury, quinine, and rhubarb, most useful in recent cases of gastric irritation; and arsenic in cases of great debility and prostration, especially when accompanied by catarrh."

Prof. Alfred C. Post urges a return to the old practice of securing immediate and fixed coaptation of *fractured bones*. Adjustment may require anaesthesia but should be accomplished as speedily as possible, and if needed, extension and counter-extension should be kept up. Permanent mechanical

support must be afforded. This, however, necessitates great caution in the use of bandages. The attendants should always be instructed to loosen the bandages at once should painful swelling occur. It is better to leave the case to nature than to endanger irreparable mischief from too tight swathing. Proper support adds greatly to the comfort of the patient, relieving him from his painful sense of helplessness; preventing in a great degree, the spasmodic twitchings which often occasion acute suffering, and diminishing the amount of inflammation consequent upon the injury. We have no doubt that with the proper precautions against excessive pressure from apparatus and appendages, this is really the best practice.

Dr. Chas. Young, of Bellevue Hospital, reports a case of *Rheumatism of the Masseter Muscles Simulating Tetanus.* Robert A., æt. 26 years, single, a native of Ireland, and a weaver by occupation, was admitted to hospital January 6th, with the following history: He had been a healthy man as a general thing, and had never had syphilis; though he confessed to habits of intemperance. Five months before admission to hospital, he had suffered from a sharp attack of acute articular rheumatism in the lower extremities.

Eight days before admission, he had another attack, which began in the joints of the fingers and invaded successively the wrist, elbows, shoulders and back. When seen by the physician, the disease seemed to have settled chiefly in the muscles of the neck, and in both masseter muscles. The latter were so much involved, that the patient was unable to open his mouth sufficiently to receive solid food; and so prominent was this symptom, that, with full knowledge of the co-existence of rheumatism, there were suspicions of tetanus, particular inquiries being made as to previous accidents. The head was thrown slightly backward, and the patient was unable to flex it upon the chest. So firmly was the head maintained in this position, that the patient frequently raised himself in bed by resting upon his heels and head as in a case of opisthotonos.

An anodyne lotion was applied to the affected joints and

the parts enveloped in cotton. The patient was placed upon the use of *Potassæ bicarb.* gr. xv, and tr. *Aconiti* ♏.iij, three times every day. The improvement has been most marked, and there remains only an inconsiderable rigidity of the left masseter muscle.

Professor Pajot, of Paris, proposes the following method of fixing the head in certain cases of *Embryotomy:* "I perforate the cranium in the usual manner, and introduce into the opening a little stick four or five centimeters long and as big as the little finger, to the middle of which a string has already been fastened. I introduce this stick endwise within the cranium by means of a tampooning forceps. When it is completely introduced, I draw upon the string: the stick becomes horizontal, either before or behind, on one side or the other of the pelvis, according as I judge to be desirable. I have then the head entirely at my control. Entrusting the string to an assistant, I apply the instrument which I have chosen, cephalotribe or forceps, without being embarrassed by the string, which takes up no room in the vagina, and I have thus remedied the mobility of the head, a cause giving great difficulty in certain operations, and especially I have remedied it without a new instrument. This, in a word, is my procedure."

Prof. Alvarenga, of Lisbon, describes a variety of *Displacement of the Heart*, involving rotation of that organ. In this case, the base is turned to the right, the apex to the left, the anterior face is above, the right border and part of posterior face look forward, the rest of this face resting upon the diaphragm; the left border looks backward.

Dr. Alex. Bogs commends as a substitute for *Tinct. iodine*, or *Comp. tr. iodine*, the following formula, which is colorless, and will not stain the skin or linen:

℞.—Tr. iod co., - - - - - ♏48.
Liq. acid carbon c. pur., - - ♏6.
Glycerine, - - - - - ℥j.
Aq. destill., - - - - - ℥v. M.

Dr. Bogs remarks of this preparation—the new product formed, the (*the Phenate, or carbolate of iodine,*) is not only one of the most powerful antiseptics and disinfectants that we possess, but it is likewise a much more curative agent than when the *Solution of iodine* is used alone. I have employed this preparation in all forms, injections, gargles, and lotions, and in all cases in which iodine is indicated. In affections of the throat, ozœna, otorrhœ, and chronic inflammations of the urethra, this medicament constitutes a sovereign remedy; for, besides its disinfecting property, it modifies the mucous membrane, causes its sensitiveness to disappear, and rids the patient of his disease in less time than when either of these two substances are used separately. It acts in the same manner in leucorrhœa and in chronic blenorrhagia.

An acquaintance of our own, (although not personally a patient), long harrassed by *Dyspepsia*, supposes himself radically cured by the use of the following prescription. The indications it is adapted to fill are sufficiently obvious:

℞.—Pulv. carb. ligni, - - - - ℥ij.
Pulv. rad. rhei, opt.,
Sodæ bicarb., - - - - *aa* ℥ss.
Pepsin, - - - - - - ℈j.
Eleosach's myristicæ, - - - ℥ss.
Eleosach's menth. pip., - - - ℥ij.

M. To be given in divided doses p. r. n. after each meal.

Much of the efficiency of the prescription is unquestionably due to the fact that it was made in Paris.

We find the formula for "Shoolbred's Powder," a noted East Indian remedy for *Enlarged Spleen*, in an article by Dr. Joseph Bates, (*Jour. of Mat. Med.*):

℞.—Pulv. jalapae, P. rhei, P. Colombæ, Potassæ bitart., - - - - *aa* ℥j.
Ferri sulphat., - - - - - ℥ss.

M. Dose sufficient to open the bowels, three or four times daily.

A very excellent alterative and tonic is afforded in TILDEN's beautiful *Elixir of iodide of calcium and protoxide of iron.* We have always, previously, been disappointed in securing desired results from the use of the "*Iodide of lime,*" but find this particular preparation to "fill the bill" to our very great satisfaction.

A saturated solution of *Tannin in elixir vitriol* is commended as a prompt and powerful *hæmostatic.* It is said to be useful in both external and internal hæmorrhages.

Capsicum having been strongly urged in the treatment of *delirium tremens*, it is stated, as a practical obstacle, that patients, after the first dose, refuse to take it. A correspondent of the *Bost. Med. Jour.* overcomes this difficulty by mixing the *Capsicum* with *Glycerine*, and enclosing it in a gelatine capsule.

The same journal translates and abridges from the *Union Medicale* an account of an operation for *Removal of the Spleen*, with *Recovery*, by Dr. Pean. The patient was a girl of 20, and the tumor prior to the operation supposed to spring from the left ovary. The operation, under chloroform, lasted about two hours, hæmorrhage being controlled by metallic ligatures and actual cautery. The recovery was singularly rapid and complete. There was no doubt as to the character of the organ removed — which, if our memory serves us, was the case when somebody removed the entire liver from a Cincinnatian, a number of years since, with no perceptible injury either to the subject or the operator.

Apropos to surgical enterprises upon the abdominal viscera, we find in the *Medical Record* the report of a case of *Extirpation of the Uterus*, by G. P. HACKENBERG, M.D., of Hudson, N. Y. The operation was undertaken under the diagnosis of an ovarian tumor, and on discovery of its real nature it was too late to recede. The patient died, on the morning of the third day, of Peritonitis. This case foots up with

those previously reported — FORTY-EIGHT with EIGHT recoveries. Comment is unnecessary.

Dr. Hackenberg, in closing the report of his case, adds the following suggestions in diagnosis:

In examining further into some of the symptoms of this remarkable case, it appears to me now that we can trace in a measure their true character.

That the menstrual function was not impaired was quite significant, if not pathognomonic in the case. Ovaries being free of disease, with good systemic blood, usually perform their function uninterruptedly; but where one or both are diseased they show menstrual trouble. Even where but one is affected, the other, through sympathy, refuses to perform its office; and their disease always manifests manifold sympathetic troubles. Uterine degeneration, partly under revulsive influences, but more owing to a deterioration of the blood, will likewise suspend the healthy action of the ovaries; but no ex-uterine growth will have the same effect, as long as the blood is left with its normal standard of fibre. Therefore the insidious manner in which the disease developed itself, and the little disturbance it caused to the general system, even after the tumor had grown to a considerable size, should have excited our suspicion, that the disease was neither ovarian nor a malignant degeneration of the uterus. In either case the symptoms would have been more active.

The tumor was movable, or rather floating, as uterine tumors usually are. In Dr. Krackowizer's case the mobility of the tumor was in such a degree, that in the examination of the case there was no agreement from which side it originated. This feature alone should awaken suspicion that the tumor was of central origin.

As a means to make out our diagnosis in this disease, the use of the uterine sound is not to be neglected; but without corroborating symptoms to sustain us, what in our hands it might reveal should be received with a cautious consideration.

The examination, per rectum, is of the greatest importance, as the relative position of morbid growth, within the base of the pelvic cavity, with the uterine organs can be accurately ascertained.

In uterine tumors, the developing symptoms are peculiar. They are the play of physiology more than pathology; being somewhat akin to those of gestation. They manifest themselves not only by characteristic sensations, but leave more or

less a print on the os tincæ, the mammary gland, the stomach and the urinary secretions. In uterine tumor the mammary glands are well developed; in ovarian tumor the tendency is to atrophy of these organs.

In uterine tumor there is not the tendency of the body to waste, and the development of cachexia that there is in ovarian tumors and malignant degeneration of the uterus. Some time after the first stages of the disease have passed over, for a period of several months, there is a tendency to obesity. This was the case with my patient.

In the advanced stage of the disease, the pain is likewise characteristic. It is like bearing a heavy weight, paroxysmally manifesting itself in catching, quickening sensations. It is like an ill-defined quickening sensation, common in gestation. The pain in the back is likewise more troublesome in this disease than in ovarian tumor.

In uterine tumor the uterus is more or less in an unusually developed state, with its sensibility exalted. Therefore in menstruation there is more or less either dysmenorrhœa or menorrhagia, if not both. This is not owing to any morbid condition of the ovaries, but simply to the increased sensibility of the uterus, and may be so slight as even to pass the special notice of the patient, her mind being so intently occupied with the main disease. The developed condition of the uterus can but be detected by way of the rectum.

Although dyspnœa may be considerable in all excessive growths of abdominal tumors, in ovarian tumors this symptom is particularly troublesome. There is even a marked difference in this symptom between fibrous and serous tumors of the same kind, the latter causing more difficult respiration than the former. These differences are owing to the more rapid enlargement taking place in the liquid tumors than those that are solid. And paroxysmal dyspnœa may be accounted for, by the sudden changes in the pressure on the diaphragm, caused either by gaseous or fœcal accumulations within certain portions of the alimentary canal.

Mr. H. C. Scorby read a paper lately before the Sheffield Literary and Philosophical Society, in which he set forth the difficulties which the toxicologist encounters in his efforts to prove a case of poisoning by *Belladonna*. These difficulties are obviated by the use of the micro-spectroscope. The spectrum of the juice of *Belladonna* is very distinct, especially

when the coloring matter has been added to a solution of *Carbonate of soda.* A small fraction of a single berry is sufficient to produce the spectrum bands characteristic of the *Belladonna.*

Dr. B. W. Richardson (*Medical Times and Gazette*) closes an article on the "*Influence of Extreme Cold on the Nervous Functions*," with the following *resumè:*

1. Nerve tissue in living animals undergoes the process of freezing at 16° Fahr.

2. In the process of freezing any nerve structure the cold acts primarily on the vascular system of the structure, causing, firstly, a stage of preaction, or exaltation of action; secondly, a stage of inertia, or temporary death; and thirdly, in recovery, a stage of reaction, also with an exaltation of action.

3. Nerve substance, when so reduced by cold as to be incapable of conveying sensation, may yet convey an electrical current; but when nerve structure is absolutely frozen through in every part, it ceases entirely to act as an electric conductor.

4. The cerebrum of a living animal may be frozen. In this state the consciousness of the animal is lost, but the functions of organic life remain the same. The animal thus placed is in a state of artificial hybernation from which it may recover. On recovery the brain does not seem to have lost any power. The phenomena are those simply of awaking from profound sleep.

5. The cerebellum may be frozen, and afterward complete restoration of its functions may be secured. In birds, freezing the cerebellum produces backward movements; in rabbits, convulsive muscular action.

6. Complete freezing of the medulla kills by destroying the respiratory power.

7. The spinal column may be frozen and restored. In birds the process of freezing the cervical part of the column produces backward movements with intervals of stupor.

8. By destroying, under the influence of cold, one part of the nervous system, we may pervert the function of another part. Thus, by arresting the functional activity of the cerebral mass, we can exalt the function of the spinal cord; and by destroying the function of the cerebellum, we can exalt the function of the anterior cerebral ganglia, or *vice versa.*

Several cases of *Fatty Degeneration*, which have recently fallen under our notice, lend interest to the following epitome of the clinical characteristics of fatty liver and fatty heart, which we scissor from the *London Lancet:*

1. The enlargement may be considerable, but is rarely so great as that often attained by the waxy liver. It is not often that the anterior or lower border reaches down beyond the umbilicus, or even so far. Occasionally, however, the vertical hepatic dullness is increased out of proportion to the actual amount of enlargement, in consequence of the organ being so soft and flabby that it folds upon itself, so that the anterior margin is depressed, and a larger portion of the organ is brought into apposition with the abdominal parietes.

2. As in waxy disease, the enlargement is tolerably uniform in every direction and there are no circumscribed bulgings, so that the natural form of the liver is but little altered. There is no expansion or bulging of the lower ribs.

3. The enlarged liver is less resistant to pressure and of softer consistence than the waxy disease Owing to its flabbiness it is easily pushed aside by the finger, and when the abdominal parietes are thin, its soft, doughy consistence may be readily appreciated.

4. The outer surface is smooth and the lower margin rounded. Although fatty degeneration may co-exist with cirrhosis, the liver under such circumstances is reduced in size. A lobulated enlarged fatty liver is rarely, if ever, met with.

5. There is no ascites or enlargement of the superficial veins of the abdomen. A large accumulation of oil in the liver so far interferes with the circulation as to lead to an anæmic condition of the liver itself, but not to such an extent as to cause ascites.

6. Even in extreme cases bile continues to be secreted, and its excretion is not arrested or impeded. Jaundice, therefore, is not a symptom of the fatty liver.

7. The same remark applies to pain. Fatty enlargement of the liver from first to last. The organ can be freely manipulated with impunity, although in extreme cases the patient may complain of a feeling of weight or distension in the abdomen, increased by turning on the left side.

8. From the absence of symptoms, few opportunities are afforded of watching the growth of fatty enlargement of the liver, but this is always slow and imperceptible.

9. The constitutional symptoms of fatty liver are few and not characteristic, and those which have been noted are often due, for the most part, to coëxisting fatty degeneration of other organs, and more especially of the heart. General debility and want of tone in the nervous and vascular systems are amongst the most prominent symptoms. The patient is easily tired, and bears depletion of the inroads of acute disease badly. The late Dr. Addison described a condition of the integuments, which he believed to be pathognomonic of fatty degeneration of the liver. "To the eye," he says, "the skin presents a bloodless, almost semi-transparent and waxy appearance. When this is associated with mere pallor it is not very unlike fine polished ivory, but when combined with a more sallow tinge, as is now and then the case, it more resembles a common wax model. To the touch, the general integuments, for the most part, feel smooth, loose, and often flabby; whilst in some well-marked cases all its natural asperities would appear to be obliterated, and it becomes so exquisitely smooth and soft as to convey a sensation resembling that experienced on handling a piece of the softest satin." These appearances are chiefly met with in females, and although they are far from being invariably present, yet in most cases the countenance and general integuments are more or less pasty and anæmic, and sometimes the skin appears greasy from increased action of the sebaceous follicles. Patients with fatty liver also suffer often from dyspeptic symptoms, such as flatulence, hypochondriasis, irregular action of the bowels—usually constipation, but not unfrequently profuse diarrhœa from slight causes.

10. Enlargement of the spleen is rarely present. The portal circulation is not obstructed to such an extent as to lead to enlargement of this organ from stasis of blood; and the spleen is not liable, as in waxy disease, to a deposit of the same material as that which causes the liver to enlarge.

There are, however, certain other organs which are apt to undergo fatty degeneration as well as the liver, and the disease in each of these organs has symptoms of its own, which, when present, will throw light on the nature of the hepatic enlargement. Thus—

11. When there is fatty degeneration of the heart, in addition to the signs already enumerated, there are often—

a. A very feeble, or even inappreciable, cardiac impulse.

b. Very faint, or even inaudible, cardiac sounds.

c. A very slow, or a quick, feeble, and irregular radial pulse.

d. Attacks of vertigo, syncope, or pseudo-apoplexy.

e. Dyspnœa on slight exertion, and a feeling of sinking at the epigastrium.

12. When there is fatty degeneration of the kidneys, in addition to the signs already enumerated, there will usually be—

a. Urine below the normal standard in quantity, oftener turbid than clear, containing much albumen, and depositing numerous oil-casts.

b. A tendency to general anasarca.

c. Extreme pallor and pastiness of countenance.

13. As in waxy disease of the liver, the diagnosis will often be materially aided by attending to the circumstances under which the enlargement occurs. Many different conditions of the system may give rise to fatty enlargement of the liver, but most of them may be referred to one of the following heads:

a. Large accumulation of fat beneath the skin and throughout the body, in persons who for the most part are large feeders and lead indolent lives. It is in this condition that the heart is most likely to participate in the fatty change, and that you will expect to discover the symptoms of fatty heart already referred to. It is patients in this state who are most prone to die of rupture of the heart. In the "Pathological Transactions" you will find several cases recorded in which patients died of rupture of the heart, and where not only was the heart found in a state of fatty degeneration, but the liver was enormously enlarged from fatty deposit, and there was a large accumulation of fat throughout the body.

b. Alcoholism.—Persons who drink immoderately of ardent spirits, particularly if they take little exercise, are very subject to fatty liver. Of thirteen persons who died of delirium tremens, Frerichs found the liver very fatty in six. Of two fatal cases of delirium tremens in which an autopsy was made by me in this hospital some years ago, there was considerable fatty enlargement of the liver in both: in one the organ weighed eighty-three ounces; in the other ninety-six ounces. It is under these circumstances that the kidneys often participate in the fatty degeneration.

c. Phthisis.—The great frequency of fatty enlargement of the liver in persons suffering from pulmonary consumption has been already referred to under the head of waxy liver.

In consumptive females it is much more common than in males. In this disease, it is not a little remarkable that, while fat disappears rapidly from almost every tissue in the body, it should accumulate in such large quantities in the liver.

d. Other wasting diseases besides phthisis—such, for instance, as cancer, simple ulcer of the stomach, and chronic dysentery—are likewise often attended by fatty enlargement of the liver.

It appears, then, that fatty liver is met with under two opposite conditions: one, in which there is an increased supply of material capable of being converted into oil, and where fat often accumulates in all the tissues of the body; the other, in which there is a rapid absorption of fat from all the tissues, with consequent emaciation. Its mode of production in the former case is sufficiently obvious; in the latter, the blood becomes loaded with oily matters derived from the patient's own tissues, and this oily matter is separated from the blood in its passage through the liver. The impaired absorption of oxygen in phthisis, interfering with the proper metamorphosis of the oil, accounts for fatty liver being more common in pulmonary than in other wasting diseases; and the greater frequency of fatty liver in women may be accounted for by women having in general a larger quantity of fat to be absorbed.

The *Journal of Pharmacy* commends as a varnish to exclude the air from excoriated surfaces, sore nipples, burns, erysipelas, etc., a mixture of four parts, by weight, of *yolk of egg* and *Glycerine* triturated thoroughly together. It makes a compound about the thickness of honey, and is unchangeable in the air. It is easily removed by water. Its entirely innoxious properties will often render it eligible.

The *Oxalate of Iron* is commended as a valuable chalybeate by Prof. Schaeffer, of Washington. It is directed in doses of two or three grains, three times a day. It is a protosalt, cheaply made and likely to be pure—is devoid of astringency, although by prolonged use it may have something of that effect. In large doses it will stimulate the circulation to the extent of producing itching over the whole surface of the

body. It is, at least, a beautiful looking remedy from its rich color.

Prof. Wm. Pirrie, of the University of Aberdeen, commends in the *London Lancet*, the use of *Carbolic acid* in Burns. Two folds of surgeon's lint, dipped in a liniment of one part of *Carbolic acid* to six parts of olive oil, are closely applied to the whole scalded surface; a double layer of tin foil is placed above the lint, and the whole is secured by a bandage. The air is thus thoroughly excluded, and in ten minutes the patient is free from pain. The bullæ rapidly wither away; suppuration is prevented, and the part is rapidly restored to a healthy condition. The same treatment is applicable after the use of a blister, which proves too severe in its subsequent local influence.

W. M. Coates, Surgeon to the Salisbury Infirmary, reports to the *Medical Times and Gazette* several cases of cure of ENLARGED CERVICAL AND OTHER GLANDS, by injections into their substance of solutions of *Iodine* and *Iodide of potassium.* As much as a drachm of the compound tincture may be used at once. Suppuration is not induced nor scars left behind. Following out the suggestions of the late Prof. BRAINARD, he has also employed the same process, with success, in Spina Bifida, Ranula, Glandular Tumors of the Mamma with Cysts, Enlarged Bursae, Thick Naevi, Strumous Diseases of the Joints, Encysted Tumors, Bronchoceles, both solid and cystic, etc., etc. Subsequent swelling and pain are to be relieved by poulticing and local or general anodynes.

W. B. Harvey, M.D., of Canton, Miss., (*N. O. Jour. of Med.*) asserts with confidence that CHOLERA MORBUS may be cured, with as much certainty, and within half the time without, as by the employment of opiates. He applies a sinapism to the epigastrium, and administers at once 15 grs. of *Calomel*, floated on a spoonful of water, and allows no more water for two hours. "Speedy relief has been the invariable result,"

which, if true, shows the difference between the climate of Mississippi and Minnesota, for instance. But who, after this, will be prepared to say, *Nulla vestigia retrorsum?*

Prof. Melbourne, in far away Australia, investigating the cause of death from *Snake Bites*, and particularly from that of the cobra de capello, found the blood in all cases very dark, fluid, and incoagulable on exposure to the air. It contained, as estimated, "millions upon millions" of foreign cells, evidently produced at the expense of the blood from the germinal matter of the poison. The blood is thus robbed of its oxygen, with gradual decrease and ultimate extinction of combustion and chemical change in every part of the body, followed by coldness, sleepiness, insensibility, slow breathing, and death. These cells he describes as circular with an average diameter of $\frac{1}{1\,7\,5\,5}$ of an inch, and containing a nearly round nucleus of $\frac{1}{3\,1\,5\,5}$ of an inch in breadth, which again contains other more minute spherules of living germinal matter. Other peculiarities distinguish it from the white pus or lymph corpuscle. He considers this a possible clue to the further study of zymotic diseases, cholera, etc., wherein he has been anticipated by many American observers.

Prof. Green, of Maine, (B. M. J.) reports a case of *Fibroid Uterus*, producing great pain by intrapelvic pressure, which caused the patient to demand an operation, whatever the result. Exploratory *abdominal section* was thereupon made, extensive adhesions found, which were believed to preclude attempt at removal of the diseased mass; the wound was closed in the usual manner, and, singularly enough, from the time of the operation, (September, 1866,) has had no return of pain. The uterus has since undergone but little change.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—FEBRUARY 15, 1868.—*No.* 4.

PHYSIOLOGY.

Investigations into the nature of Miasmata furnished by the human body in health (read before the Academy of Sciences, the 10th of September, 1867, by Dr. Lemaire J. Paris).

TRANSLATED EXPRESSLY FOR THE JOURNAL BY WALTER HAY, M.D.

For a very long time; experience has taught physicians and veterinary surgeons that both men and animals, in health, assembled in large numbers in a confined atmosphere, speedily communicate to it new properties, which engender transmissible maladies. It is under these circumstances that the typhus of prisons, ships and ambulances, typhoid fever, as well as the typhus of animals, glanders, etc.

Physicians, from the time of Galen up to the commencement of this century, impressed with the peculiar appearances presented by the fluids and tissues in these diseases, referred their alteration to putridity. Their opinion upon this point was so firmly established, that they gave the names *putrid degeneration* and *hospital gangrene* to the special transformations sustained by wounds in this confined air, and of *putrid fever* to typhus and other maladies which presented analogous characteristics.

It must be admitted that there were opponents to this mode of considering these phenomena. A certain number of physicians could not admit that the fluids and solids could undergo putrefaction during life.

At this epoch, the term *putrid fever* is abandoned to history, and erased from medical nomenclature.

At those periods, the causes of putrefaction were unknown; it was only by analogy that physicians admitted the putridity of the fluids. Hence, their opinions were only based upon an hypothesis which other hypotheses have subverted.

In order to elucidate this subject, I have undertaken some experiments, the results of which, appear to me to demonstrate that the morbid phenomena, attributed to putridity by the older physicians, are the work of microzoa, which determine the putrefaction of organic matters.

Before detailing my experiments, I beg the Academy to permit me, by reason of the importance of this subject, to review rapidly the state of science upon this point.

The frightful ravages occasioned amongst men and animals by the air of confined localities, have, for a long time, stimulated the zeal of a great number of very distinguished physicians and chemists, who have undertaken researches in the hope of discovering their causes.

By applying the terms miasma, effluvium, to the supposed causes of these maladies, physiologists have learned nothing of their nature; although it must be acknowledged that they concede and designate something to be sought—to be discovered. The same may be said of the numerous and diverse theories which have been imagined. These names and these theories propose a problem without solving it, and one too which still awaits solution.

The physicians of the 16th, 17th, 18th, and 19th centuries had recourse to the idea of a ferment to explain the causes of the alterations which I have pointed out. But what diversities of opinion do these words ferment, and fermentation embrace? Some, seeing only motion and heat produced by fermentation, make use of them to explain the contraction of

the ventricles of the heart; the heat, the agitation and the acceleration of the pulse in fever; others consider the secretion of the saliva, of bile, of semen, etc., as the products of fermentation, etc., etc. A learned Jesuit, Athanasius Kircher, foresaw the nature of ferments. In his opinion it was to the animalculæ, the worms and the insects which are found in matters in process of alteration, that fermentation was to be attributed. That their eggs are the leaven of ferment, which gives origin to this phenomenon.

The propagation of transmissible maladies, was the work of these animalculæ, these worms, these insects. This theory had numerous partizans during more than a century, after which it was completely abandoned.

M. Raspail, who has attempted to revive it, has only attracted the sarcasm of physicians. The author of the theory, equally with M. Raspail, lacked evidence sufficient to cause it to be accepted definitely. The imagination played too prominent a part in it. With others, the ferments which produced diseases were leavens of a peculiar nature. In our time a ferment has been considered both as a vegeto-animal matter, and as an albumenoid matter altered by oxygen.

In presence of such diverse opinions upon the nature of ferments, it was impossible to understand them, and to recognize the true cause of the maladies attributed to ferments, so the question remained without solution.

The brilliant researches of M. Cagnard-Latour upon alcoholic fermentation, the experiments of Schultz and Schwann, and other savans, again attracted attention toward living ferments. I believe that I assisted in demonstrating, in my investigations upon coal-tar and phenic acid, that microphytes and microzoa produce the fermentation termed spontaneous. This investigation has thus entered upon a new field, but a different one from that which Kircher traced, and which M. Raspail has attempted to revive.

Chemists of the first order have endeavored to find the solution of the problem of the nature of miasmata by analyzing the air. Their experiments upon confined air demon-

strate that its composition differs from that of pure atmospheric air, by a much greater quantity of watery vapor, by much carbonic acid, by traces of sulphuretted, ammoniacal and carburetted hydrogen gases, and finally, by a larger quantity of organic matters. The experiments of Messrs. Regnault and Reiset upon respiration, which were made with great precision, demonstrate that warm-blooded animals disengage by perspiration only indeterminable quantities of sulphuretted and ammoniacal gases. It is also in almost unappreciable quantities that the presence of carburetted hydrogen has been determined. It can not be, then, that the diseases above referred to can be reasonably attributed to these last named bodies, since there exist of them only harmless traces.

It remains, then, to examine the influence of the carbonic acid, the watery vapor, and the organic matters. It is very evident, that the carbonic acid exhaled by the lungs, accumulates in confined places, which may thus become irrespirable and very dangerous from deficiency of oxygen, if there does not exist sufficient communication with the external air to permit its renewal. The increase in the amount of the watery vapor may impede respiration. These facts are well known, and therefore I will not dwell upon them longer.

The results furnished by chemical analysis have been deemed insufficient, not only to explain the symptoms which the patients present, the nature of the alterations which the fluids and the solids exhibit under these circumstances, but even to account for the mode of transmission, of the propagation of these maladies, and the immunity which certain individuals enjoy.

For example, how a man or an animal, not sick, or merchandize going out of a vessel or a stable where typhus prevailed, could transport the cause of this disease thousands of miles, and propagate it in a ratio sometimes very considerable.

Since thirty years ago, a very prominent function has been assigned to the organic matters contained in the air.

In the investigations upon ferments and miasmata, which extend back to 1859, I was compelled to determine that the essential characteristic of transmissible maladies (contagions of authors), is the reproduction and the multiplication of the specific morbid element (morbid species), that the cause of these diseases can not, in my opinion, be attributed to chemical bodies, nor to organic matters, because the former, no more than the latter, can reproduce or multiply themselves. For example, an animal is poisoned by rattlesnake virus, by curare, by arseniated hydrogen, by strychnia, or by any other poison, solid, liquid, or gaseous, this animal can not transmit the cause of its disease or death by contact, or by the interposition of the air to other animals of its kind. The action of these poisons is limited to individuals, because they can not reproduce or multiply themselves.

In numerous cases of poisoning, occasioned by the virus of serpents, by mineral, or by vegetable poisons, I do not think that it has ever been asserted, that the subjects who have died after the inoculation of the virus, or the ingestion, or the inspiration of the poisons, have transmitted the cause of their disease or their death, by contact, or by the exhalations from their bodies, to friends who have visited them, to relatives who have nursed them, nor to those who have watched, buried, or exhumed them; whilst miasmata transmit themselves under all these circumstances, originate the diseases of which I have spoken, and multiply themselves.

This is not all; poisons—solid, liquid, or gaseous—produce their deleterious effects, so to speak, instantaneously. Miasmata, on the contrary, have a period of incubation and of development, exhibiting themselves by different symptoms, called by physicians premonitory (prodromata). They may continue several days before threatening the life of the individual. Finally, if it is attempted to explain the propagation and the multiplication of miasmatic diseases from Europe to America, or to Africa, or reciprocally from those countries to Europe by chemico-gaseous poisons, the only ones whose

existence can reasonably be supposed, this explanation appears to me impossible.

Indeed, how can it be supposed, that a small quantity of gaseous poison can be transported across seas without injury to the person bearing it, resist evaporation, produce among other individuals new symptoms of poison, and propagate them to a whole population?

Thus, whatever may be the action of a chemical poison, it must be admitted that it is impossible to explain, by means of it, the reproduction and multiplication of the morbid species, not only in a large number of inhabitants of a city or of a nation, but in those of an entire world, as is apparent in the case of variola, cholera, typhus, etc.

It is, in my opinion then, necessary to seek elsewhere than in the chemical compounds the solution of this difficult problem. Experts of great skill, having found nothing by chemical analysis, in seasons of epidemics, in the atmospheric air, which could be referred to miasmata, have denied their existence.

M. Chevreul, in a learned report which he read to the Academy in 1839, upon an epizootic which raged amongst the cattle of Paris and its environs, said, that in denying the existence of miasmata, because it had not been demonstrated by chemical analysis, they had gone too far. He foresaw the possibility of making this demonstration by the aid of mechanical or physical means, by compression or by cold. It is precisely by the aid of cold, that I have, since 1861, demonstrated the nature of putrid miasmata, and three years later, we demonstrated, by the same means, with my excellent friend Prof. Gratiolet, that the air of the most unhealthy portion of Sologne, contained also microphytes and microzoa in process of development.

The experiments which I shall have the honor to submit to the Academy, have also been made, by the aid of cold and of the microscope, upon the vapor of water contained in the atmosphere of localities which I will indicate hereafter.

The first difficulty to be surmounted, in these investiga-

tions, has been the choice of subjects. I have considered that soldiers in active service, in the prime of life, subjected in time of peace to a systematic mode of life, to a wholesome alimentary regimen, uniform for all, would afford me all desirable guarantees of men in a perfect state of health. Thanks to my friend M. Reiron, Capt. and Adjt. of the 4th Regt. of Voltigeurs of the Imperial Guard, I have been enabled to make experiments upon the air of the chamber occupied by the men of his company, barracked at Fort de l'Est, near St. Denis. These soldiers had returned some days since from the very healthy camp at Chalons.

The Fort de l'Est, separated from every habitation, overlooks the plain of Aubervilliers. It is in good sanitary condition.

My experiments were made on the 19th of September, 1866, from four to half-past five in the morning, simultaneously at three points—that is, 1st, upon the air of a chamber of the barrack; 2nd, upon that of a casemate; and 3rd, upon the external air; this last to serve as a standard of comparison. I chose this early hour in the morning to experiment, as the soldiers were yet in bed, the doors and the windows shut, and also because profound quiet reigned upon the exterior of the fort. By these precautions, I avoided the causes of agitation of the air, which would have attracted different sorts of dust, and rendered my experiments less conclusive.

The Voltigeurs had been in bed since nine o'clock in the evening, hence the air was loaded during more than eight hours with exhalations from their bodies.

EXPERIMENT I.

Made in the barrack of the fort, on the second floor, in a chamber containing twenty-four beds, of which twenty were occupied. Its cubic content is about 420 metres. Its walls and ceiling had been white-washed with lime. It is provided with two large windows, one to the east, opening upon the plain, the other to the west, upon the large court-yard of the fort,

and a large door, closing the chamber upon the interior stairway, are the only openings which it possesses. There is no chimney nor ventilator. The temperature of this room, at the moment when the experiment was made, was 18° Centigrade (70°·16 Fahr.) The odor of its atmosphere, *sui generis*, was disagreeable. I collected in the middle of it, by the aid of my apparatus filled with ice, about six grammes of watery vapor reduced to a liquid; I placed this in a new flask, of sixty grammes capacity, previously washed with distilled water, and closed it with a new cork, likewise washed.

At the moment of its condensation, the liquid was colorless and limpid, its odor being the same as that which I had perceived in the atmosphere of the room. Its taste was slightly pungent. It exercised no appreciable influence upon blue or red litmus paper, nor upon those of turmeric or lead.

The microscopic examination was made two hours after the condensation, in order to give the liquid time to place itself in equilibrium with the atmosphere, my object being to ascertain if there existed microphytes, or microzoa, it was necessary to give it time to become warm again, because at zero animalculæ give no sign of life. The thermometer indicated 16° Centigrade. At this period of the experiment, the microscope enabled me to determine, independent of few organic fragments and grains of dust, the existence of a considerable number of diaphanous bodies, whose forms could be referred to the following: spherical, ovoidal, cylindrical, regular, and irregular. The cylindrical bodies were about one to two thousandths of a millimetre in width, and three thousandths of a millimetre in length. The diameter of the sperical and ovoidal bodies, varied from fifteen to twenty ten thousandths of a millimetre. These bodies, as we shall see, are microphytes and microzoa in process of development. A new examination, made four hours after the preceding one—that is to say, six hours after the condensation—gave me the following results: The diaphanous bodies, of which I have just spoken, were much more numerous than at the first examina-

tion. They existed by thousands in a little drop of the liquid. Moreover, bacteria termo and puncta were in motion; little wand-like vibriones executed their rapid undulatory movements. Independently of these little beings, I found a very large number of a species of animalcules, whose existence I had not yet established in my microscopic investigations. I will describe them. They are diaphanous, ovoid; do not present any appreciable opening or filaments. They execute movements rapid in every sense. The greater number presented, in the middle portion, a very decided circular depression, which appeared to mark the place of division for their reproduction. The dimensions of an individual did not present much variation from fifteen to twenty ten thousandths of a millimetre in length, and from ten to fifteen ten thousandths of a millimetre in breadth. Is it a vibrio? If their simple organization alone, it is not incredible. But if, with Ehrenberg and Dujardin only, those animalcules are to be considered vibriones, whose bodies are flexuous in their movements, these can not be classed amongst vibriones, since they do not present this characteristic.

The monads, whose organization are most simple, have a flagelliform filament. I have not been able to determine the existence of this filament. I have, however, an excellent microscope, and I work with a magnifying power of six hundred diameters.

Ehrenberg described oviform monads, some indented, others not. These characteristics are very nearly those presented by the animalculæ just described. Dujardin, who criticises very severely the works of Ehrenberg, says that he has never seen these any more than other species of monads described by the learned Prussian micrograph, and appears to doubt their existence. In spite of the consummate skill of Dujardin, I must say that the characteristics of this animalcule appears to me to associate it in all its points with the ovoid indented monads of Ehrenberg. Could this animalcule be considered the cause of typhus? I will discuss this question hereafter. Before resuming the description of my ex-

periments, I beg the Academy to remark carefully that, six hours after the condensation of the watery vapor, I found in this liquid two species of bacteria, wand-like vibriones, and the ovoid monads of Ehrenberg in great numbers, all executing their habitual movements. This fact is all the more interesting, because there are never found in so short a time, so great numbers of animalculæ in the vapor of atmospheric water collected in healthy localities, nor even in infusions prepared with fresh matters. There is necessary, at least, a period of forty-eight hours, and a temperature of 16° Centigrade, to determine their existence. Moreover, it may happen that no animalculæ are developed in the vapor of water collected in the external air. I have made M. Chevreul a witness of a fact of this kind, in an experiment made under his eyes.

It must necessarily be that the animalculæ, of which I had just spoken, had commenced to develop themselves to some extent. When I shall have demonstrated their existence in considerable quantities upon the human body, this fact will be easily explained. I return to my experiments.

Twenty-four hours after the condensation, I found, in the liquid already referred to—that is to say, in a single drop of it—numerous bacteria termo; some isolated, others agglomerated, forming little masses composed of ten, twenty, or even a hundred of these animalculæ, a few bacteria, catenula, and puncta; numerous wand-like vibriones very active, a great number of ovoid monads; finally, spores, ovoidal, and spherical of from fifteen to thirty-five ten thousandths of a millimetre diameter. The little ovoid, spherical, and cylindrical bodies, which were so numerous in the first hours, had diminished in considerable proportion. The fact, which confirms some others I have already published, authorizes me, still more strongly, to assert that their number is in the inverse ratio to that of the animalcules and the spores; considerable at the beginning of the experiments, it diminished in proportion as that of the animalculæ and spores increased. Is not this proof that these little bodies are infusoria in a

rudimentary state, whose germs authors admit to exist, without having seen them?

EXPERIMENT II.

Made upon the confined air of a casemate. It contained thirty-eight beds, of which seventeen were occupied, the cubic content being 530 metres. Its floor is bitumen, and its walls, rough-cast to the height, had been recently white-washed with lime. A little window (embrasure) opens upon the moat, which only contains a little rivulet in the centre. A large window-frame, which occupies all the height and width of the casement, closes it upon the great interior court-yard of the fort.

I expected to find the air of this casemate much loaded with miasmata, but my anticipations were not realized. I was struck, upon entering, with the difference which existed between the odor of its atmosphere and that of the chamber of the barrack already referred to. I suspected, therefore, that it was provided with ventilators, whilst that of the chamber of the barrack, as has been stated, was deprived of this excellent means of purification. M. Reiron, indeed, questioned the chief of the chamber, who showed us two ventilating tubes placed in the ceiling.

I will state, that the number of soldiers in proportion to that of the beds, was much smaller, since in the chamber of the barrack twenty out of twenty-four were occupied, whilst here, but seventeen out of thirty-eight were tenanted. This conditioned, in addition to the presence of the ventilators, ought to contribute to render its atmosphere less vitiated.

The watery vapor was condensed in the middle of the casemate, collected and placed in a new vial of the same capacity as the first, and corked. I investigated its composition at the same hour as that procured from the barrack, and found that it differed from it very sensibly. Its odor and its taste were almost neutral. It was without appreciable action upon test papers. I found in it spherical, ovoidal, and cylindrical bodies, but in quantities much less than in the first experiment.

But what I did not establish in this former, two hours after its condensation, was the existence of two bacteria catenula, formed of five joints, and of two wand-like vibriones performing their habitual movements, evidence that there may be found in the air living microzoa in a very advanced stage of development.

In the other examinations, made six hours and twenty-four hours after the condensation, I found the same diaphanous bodies, the same animalculæ, and the same spores as in that procured from the barrack, but in much less quantity.

The results of the microscopic examination were in harmony with those made by the unassisted senses, and with the more healthy condition of the casemate, by reason of its better ventilation.

EXPERIMENT III.

Made upon the external air to serve as a standard of comparison. Whilst I experimented in the barrack and in the casemate, my apparatus was also in operation at a point one metre above the highest portion of the fortification which overlookes the plain. The weather was fine, and the wind scarcely perceptible. I arranged that these three experiments should be made at the same time, in order that their results might be comparable and free from all objections.

I ought to mention that the chamber of the barrack, where I obtained so remarkable results, is at the same height as the fortification, and consequently, is supplied by the same stratum of air. The results which this experiment furnished are as follows: At the moment of the condensation, the liquid was limpid, colorless; its odor was that of the fresh, pure air which is inhaled in the open country in the morning. It was without action upon test papers. Its taste was fresh, and resembled that of pure water.

Examined with the microscope two hours after its condensation, I determined in it the existence of the spherical ovoid and cylindrical bodies before mentioned, but they were very scarce, and very small; of some fragments of dust and

organic debris; finally, of cubical crystals, probably chloride of sodium, no animalculæ nor spores. Six hours after the condensation, I found the same things, but no animalculæ nor spores. Twenty-four hours after the condensation, I made, with the greatest care, six microscopic examinations, and found neither spores, nor bacteria, nor vibrions, nor monads. There were left only the diaphanous bodies referred to above. It was only after forty-eight hours after the condensation that I was able to establish the existence of some bacteria termo, of some very small wand-like vibriones, and of some very small spores, but no monads.

When these results are compared with those obtained in the two other experiments, one is struck with the difference which exists in the composition of the watery vapor collected in the open air, in the casemate, and especially in that of the chamber of the barrack.

At the end of six hours, there existed numerous animalculæ and spores in the confined air—I found them even two hours after the condensation, whilst a period of forty-eight hours was necessary to exhibit a few in the watery vapor collected in the open air.

This difference is maintained up to the end of the experiments, which I continued during ten days. I will narrate their details in a memoir.

Now, it remains for me to demonstrate what portions of the body furnish the microphytes and the microzoa referred to above, how they are disseminated into the air, and if they can be considered as the cause of typhus, of typhoid fever, and of other transmissible maladies. If the Academy will permit me, I will do myself the honor to discuss these questions at the next session.

BOOK NOTICES.

ANNUAL ABSTRACT OF THERAPEUTICS, MATERIA MEDICA, PHARMACY, AND TOXICOLOGY, FOR 1867; followed by an original memoir on Gout, Gravel, and Urinary Calculi. By A. BOUCHARDAT, Prof. of Hygiene to the Faculty of Medicine, Paris; Member of the Imperial Academy of Medicine. Translated and edited by M. J. DE ROSSET, M.D., Adjunct Prof. of Chemistry, University of Maryland; Member of the Maryland Academy of Sciences. Philadelphia: Lindsay & Blakiston. 1868. Pp. 314.

A very useful little work, giving a *resume* of the important subjects noted in the title, "as they appear in Paris," and in small compass affording "aid and comfort" to the hard-working practitioner whose time and means will not permit investigation of the original sources. A note, with enclosed slip from the publishers, calls attention to an unfortunate error on page 139, which should be corrected at once by every reader of the book. In the formula for the *Liquor Donavan-Ferari*, change it to read as follows: "℞ Iodide of arsenic, 3 grains; distilled water, 30 drachms; mix, and dissolve by heat in a glass mattress; add, biniodide of mercury, 6 grains; iodide of potassium, 45 or 60 grains; filter and preserve in a brown bottle, well corked. The solution thus obtained is limpid, and of a light straw tint; one drachm containing about $\frac{2}{3}$ of a grain of iodide of arsenic, and about double that quantity of biniodide of mercury."

THE HALF-YEARLY ABSTRACT OF THE MEDICAL SCIENCES. Being a digest of British and Continental Medicine, and of the Progress of Medicine and the Collateral Sciences. Vol. XLVI. July–December, 1667. Philadelphia: Henry C. Lea. 1868.

BRAITHWAITE'S RETROSPECT. Part LVI. January, 1868. W. A. TOWNSHEND & ADAMS, 434 Broome street, New York.

HALF YEARLY COMPENDIUM OF MEDICAL SCIENCE. Part I. January, 1868. Philadelphia: Published by the proprietors, 115 South Seventh street. 1868. Edited by Drs. Butler and Brinton.

EDITORIAL.

BACK NOS. WANTED.—*Owing to the large increase in our subscription list, although it was supposed a sufficient number of copies had been provided, we are entirely out of copies of the* JOURNAL *for the months of* JANUARY, JUNE, SEPTEMBER, OCTOBER, *and* NOVEMBER, 1867, *Vol.* XXIV. *We will pay twenty-five cents each for copies of either of these, in cash or by credit on the present volume, as desired. Will our friends who do not file their numbers oblige us by responding?*

The Endoscope.

Subscribers, or others, who have not as yet received their copies of the *Endoscope* as ordered, will receive them in a few days, the present supply being exhausted.

Spring Course of Instruction in Rush Medical College.

This course, it will be remembered, opens on the first Monday of March ensuing, and continues during three months. Daily lectures, recitations, and clinics at the college and hospitals of the city. Free to all matriculants of the college and graduates in medicine. For details address the Secretary of the College, Prof. DeLaskie Miller, M.D., 518 Wabash Avenue, Chicago.

There will be daily clinics at the college throughout the entire year. In fact, opportunities for medical students, the present year in this city are largely superior to any which have heretofore existed, and, it is fair to say, fully equal their wants.

Advertising Specialities.

Communications are on file discussing this vexed question. Whether a card published in the secular press, announcing that M.D. so-and-so has such office hours at such a place, and pays especial attention to such and such a class, or species of

affections, be, or not, guilty of violating the "code," and, therefore, entitled to condign punishment. The JOURNAL pauses before rushing into the melee.

The Practice of Medicine by Statute.

The time-honored fable of the frogs who wanted a king, has been of much practical service to those who have duly pondered its meaning. The moral is put in more elegant phrase by Shakspeare, and, on the whole, it *is* well to consider whether it may not be better to submit to present ills rather than to fly to those we know not of. The trouble in the medical profession now (as it always has been) is, that it contains a class of uneasy gentlemen, with somewhat straitened intellects, who, hopeless of achieving any thing more than dull mediocrity by positive additions to the common stock of professional knowledge, seek to acquire notoriety at a cheaper rate by getting up a clamor about Medical Reform and Medical Legislation—"Notoriety is the next step to Fame"—and easily mistaken for it by the groundlings.

The JOURNAL reproduces with unqualified approval the following extract from an editorial in the *Chicago Post*. The editor, having spent many years in the profession, and many years of keen observation outside of it, knows whereof he writes, and is amply qualified to judge:

"If the diploma of a reputable school of medicine is not a sufficient passport to public confidence as an evidence of character and ability, it is not likely that a certificate from a State Board of Censors would be looked upon in a very different light. The element of politics would enter into their deliberations and influence their actions. People are notoriously suspicious of any thing that is done under the auspices of the opposite party, and a State doctor, whose qualifications were vouched for by a Republican Board of Censors would be obliged to seek his patients among his own partisans, and *vice versa*. The practical effect of such legislation as is contemplated, would be to place the whole business of the Board in the hands of that particular school of medicine which happened to wield the strongest political and financial influence.

The hardest thing for some politicians to understand is that there are some things which are outside the pale of legislation, and are best left to regulate themselves. This business of a State Medical Bureau is plainly a superfluity. Since no law can prevent people from patronizing quacks if they so desire, no amount of legislative wisdom can devise a scheme whereby the services of the right doctor shall in a majority of cases be secured."

We shall recur to this subject soon.

RUSH MEDICAL COLLEGE.

ANNUAL COMMENCEMENT EXERCISES — ONE HUNDRED AND TWENTY-SIX DEGREES CONFERRED.

ADDRESS BY THE PRESIDENT AND RESPONSE BY THE CLASS.

THE CLASS OF '68 THE LARGEST THAT EVER LEFT A WESTERN INSTITUTION.

VALEDICTORY ADDRESS BY PROF. R. L. REA, M.D.

THE twenty-fifth annual commencement exercises of Rush Medical College were held Wednesday evening, February 5th, in the spacious lecture room of the college, located on the corner of Indiana and North Dearborn streets. The room was full to overflowing with students of this institution — now the largest in the West — and their friends, including a number of ladies, and the exercises were of a most interesting nature, and gave evidence of the high position which the college has attained.

CONFERRING OF DEGREES.

The exercises were opened by prayer by Rev. Robert Collyer, D.D., and the degree of Doctor of Medicine was then conferred upon each member of the graduating class, one hundred and sixteen in number, by the President of the Faculty, Prof. J. V. Z. Blaney, M.D.

The following are the names of

THE GRADUATING CLASS.

Francis G. Arter,
James B. Armstrong,
James H. Barnwell,
A. W. Bosworth,
Hugh Brownlee,
James Barr,
James R. Barnett,
James H. Baker,
Amos Babcock,
Robert N. Barger,
William H. Christie,
Pascal L. Craig,
John Cassidy,
Henry A. Chase,
James M. Cook,
J. A. Carter,
F. Wallace Coffin,
John B. Draper,
Nelson A. Drake,
David L. Davidson,
Thomas A. Elder,
George W. Elkins,
John T. Foster,
John G. Frank,
Benjamin H. Freeland,
David M. Finley,
Frank Fifield,
William Flinn,
William J. Fern,
John A. M. Gibbs,
Lyman T. Goodner,
John H. Goodell,
Joseph B. Griswold,
Henry C. Gemmell,
Samuel R. Hicks,
Abrogene Holland,
Cyrus Heywood,
Fernand Henrotin,
Merritt Hurst,
William H. H. Hagey,
Byron Holmes,
Christian B. Hirsch,
J. Robert Haggard,
Walter L. Johnson,
Thomas C. Kimball,
Thomas N. Livesay,
Gershom J. R. Little,
Edmund L. Lathrop,
William A. Looney,
Louis B. La Count,
John G. McKinney,
Abraham Miller,
Ben. C. Miller,
Charles Muth,
Leonidas B. Martin,
James McClure,
John B. Moore,
Americus V. Moore,
Samuel P. McCrea,
Thomas C. McCaughey,
William J. Maynard,
Thomas C. Murphey,
Francis McGuire,
Charles A. McCollom,
Albert B. McKune,
Edward L. Mayo, Jr.,
James Moffitt,
Albertis P. McCullock,
William R. McMahan,
Garrett Newkirk,
John R. O'Reiley,
Charles T. Parks,
William Quivey,
William S. Pitts,
Joel Prescott,
John H. Peters,
Bennett A. Payne,
James Pankhurst,
William R. Page,
Joseph B. Rood,
J. Rodney Rundlett,
Wilhelm Reinholdt,
Antinous A. Rowley,
William S. Robertson,
Justin Ross,
E. H. Pardee,
John G. Riddler,
Corydon Richmond,

Royal Reed,
Harrison Steele,
Ebert A. Sharon,
Daniel Spittler,
Josiah T. Scovell,
John W. Shipton,
De Witt Clinton Smith,
S. E. Scanland,
John P. Seawright,
Oscar F. Seeley,
John F. Shrouts,
Dana B. Seger,
Charles B. Thrall,
D. H. Arthur Thrane,
George O. Taylor,
John E. Tuttle,
L. E. Towne,
W. Alphonso Wood,
D. Lindley Woods,
Mather S. Wheeler,
Thomas Audley Wakeley,
Charles A. Wheaton,
Richard M. Wigginton,
Hiram G. Wyckoff,
Rush Winslow,
James I. Wakefield,
Henry Joseph Warmuth,
Thomas J. Yount.

The *ad eundem* degree of Doctor of Medicine was conferred on the following gentlemen: Daniel C. Babcock, M.D., John W. Cowden, M.D., W. F. Hani, M.D., William Little, M.D., William N. Bailey, M.D., Abner Hard, M.D. And the Honorary Degree of M.D. on Joseph Van Dyke, of Illinois; Orpheus Everts, M.D., of Indiana; John Ten Broeck, M.D., of Illinois; Joseph Janvier Woodward, M.D., Surgeon U. S. A.; J. S. Bobbs, M.D., Indiana.

President BLANEY then addressed the graduating class, as follows:

GENTLEMEN,—The diploma which each of you has just received, gives to you the endorsement of this Institution that you are prepared to enter the ranks of a useful, an honorable and a humane profession, as peers of its older members. It confers upon you the honors of Rush Medical College with whatever of prestige it has earned by twenty-four years of earnest effort, as an exponent of the principles, the practice, and the ethics of legitimate medicine. That you have chosen this, from the many schools of medicine whose portals were open to you, as that from which you have preferred to receive your degree, is evidence of your recognition that its diploma is of value, as a certificate of proficiency, and is respected by the communities among which you expect to labor for professional position and emolument.

This diploma carries with it the authority of the State of Illinois, that you shall be legally recognized as legitimate practitioners of medicine. It assures you that the Faculty of the

College and the Board of Trustees are willing to entrust to you the reputation of the Institution, by placing you upon the list of its Alumni.

These favors and honors you have earned by complying with the rules of the College, and by passing satisfactorily the ordeal of its examinations; but the acceptance of this diploma entails, on your part, duties and obligations, which as men of honor you can neither ignore nor avoid. These obligations are: 1st, to the College; 2nd, to the medical profession; 3rd, to community; and, 4th, to yourselves.

To the College that, as an Alumnus, you will never detract from her reputation by swerving from the direct paths of legitimate medicine, and giving countenance, either directly or indirectly, to any form of empiricism. To the profession, that you will strictly observe and practice the rules of ethics established as landmarks by the general consent and approval of its leading minds. To community, that you will, as members not only of a learned but of a benevolent profession, respond cheerfully to the demands of suffering humanity, even to the sacrifice of your own comfort and pecuniary interests, and contribute your knowledge and aid freely to the conservation and preservation of the public health, the diffusion and enforcement of proper hygienic laws and regulations. To yourselves, that you will comport yourselves as honorable and upright citizens, upholding the right and fighting the wrong, subservient to the just legal authority of the recognized government under which you may reside, and respecting its authority; and more than this, that you will continue to be unremitting students, with an earnest endeavor to advance the liberal science to which you are now admitted as professed licentiates.

To these obligations, gentlemen, are you bound by no oath, but by that which is equally strong and sacred—the respect due to your own chosen Alma Mater, and to your own and her honor.

Had I, gentlemen, the gift of eloquence, I would endeavor to impress upon you the high aims and the ennobling aspirations in

which the true votary of our noble science is free to indulge; but I should couple them with narration of the toil, the sacrifices, the heavy burden of responsibility which clings around and impedes the progress of the aspirant for fame and position in the ranks of the honored few among medical men. I might deter those among you who are timid from pursuing the course of life which they have laid out for themselves, but I would arouse the earnest and the brave to greater effort to accomplish noble deeds of enterprise and discovery in the yet untrodden paths of physiology, of pathology, and of the branches devoted to the practical alleviation of disease. I could point you to a destiny and promise for you a niche in the temple of fame, which the kings and magnates of all nations might envy.

Your preceptors have only opened to you the portal of the temple whose *adita* you are now commissioned to explore. Upon all sides and before you are mysteries to be unraveled and immense treasures of knowledge to be gleaned, but not by sluggards, not by the timid, but by the toilers, the self-reliant, and the brave. Among which of these classes will each of you rank yourself? Permit me to give you a password, which is a key to success, to fame, and to the respect of your fellow-men, and of posterity. That password is WORK. Keep it before you, carry it on your person, think of it, dream of it, but above all *practice* it. It is the secret "sesame" which, with a fervent reliance on the aid of a Providence which helps all those who will help themselves, opens the door to professional success, and exhibits the treasures which have been stored and retained for use of the fortunate explorer.

Remember that your success reflects honor, your failure disgrace upon this Institution and the Faculty who have to the best of their ability labored to induct you into the rudiments of your profession. By great effort of your Faculty this commodious edifice and abundant appliances for your instruction have been provided for you. The present course of lectures has been conducted under great disadvantages, from the unfinished state of the building at the beginning of the session, by which much

serious inconvenience and additional labor was required of the Faculty so as to fulfil their own wishes, and in making the course complete in every respect. They are willing and are satisfied that the proficiency of the graduating class should be the test of the measure of success they have accomplished, and I am fully authorized by my colleagues in expressing to you, gentlemen, the great satisfaction which they have experienced from the constant and unremitting attention upon the lectures by the entire class, the harmony which has prevailed universally between the pupils and their instructors, the uniform gentlemanly deportment and respect for order, both as regards your conduct in the Institution and outside among the citizens, which have been marked features of the present session, and by the general high average of proficiency exhibited in the examinations of the graduating class of 1868.

We do not feel like parting with you, gentlemen, without this expression of our honest sentiments that you have done your part in sustaining them in their efforts, and of our further satisfaction that not a single death or case of serious illness has occurred among the members of this the largest class which has ever attended our College, and throughout this the longest session we have ever held. This we accept as good evidence of the health of the city, the sufficient ventilation and heating of our building, and the good moral character and proper observance of hygienic laws by the class at large.

We desire further to say to every graduate, that his diploma constitutes him a member of the Alumni Association of the Rush Medical College, which was organized at the opening of the session just closed, and that his frequent attendance upon the annual meetings which are hereafter to be held on each Commencement day of the College, is earnestly invoked, and will be accepted by the Faculty as the strongest evidence of continued attachment to the Institution with whose interests and welfare they have this evening become forever identified. And not only then, but at all times, all the advantages for study which the Institution now furnishes or may hereafter provide, are open to

each one, and he will always have a cordial welcome to the halls of his Alma Mater.

I can not close without a word of remark to the under graduates. You are all, gentlemen, familiar with the disadvantages under which the Faculty have labored from the impossibility of providing for the arrangement of their respective Cabinets and the Museum in the earlier part of the course. These disadvantages will not obtain at the opening of the next session, and I am authorized to state that many and important additions to the means of illustration will be made in each department, and a complete arrangement of all the cabinets will be effected before the opening of the next session, and if it is felt by you that the course of instruction for the present year has given satisfaction, we may safely anticipate that increased facilities will warrant the officers of the College in promising a still more satisfactory course of instruction to the class of 1868 and '69.

WALKER L. JOHNSON, of the graduating class, responded as follows:

SIR,—In behalf of my classmates I acknowledge the honor conferred upon us by the Trustees of this College, by you and your associates.

We fully recognize your right to demand of us, on the receipt of these diplomas, that we shall at all times strictly adhere to the practice of legitimate medicine, refrain from all things which savor of empiricism and charlatanry, and shall ever recognize and be governed by a strict code of medical ethics.

This, from the oath of Hippocrates, shall be a guide for each and all of us: "My life shall be pure and holy; into whatever house I enter I will go for the good of the patient; I will abstain from inflicting any voluntary injury, and from leading away any, whether man or woman, bond or free."

In their name I will say, that the time will never come when this college will be ashamed of this class.

We shall always be proud of our Alma Mater; her interests are our interests; we shall ever labor to sustain her in her present proud position, and will always be prompt to defend her

from both open and insidious attacks. This is not the last time this college shall see us. You will hear from us frequently. This is our home; this the head center of medical truth. We are the radii of the circle, over which the waves of scientific truth travel from hence throughout time and space. And, sir, I speak as if each one of my fellows in arms were speaking of himself when I say, with this diploma in my good right hand, and with this indomitable heart, there shall be a record of that truth, both in teaching and practicing, that shall redound to the permanent fame of this great institution. And may my tongue cleave to the roof of my mouth, and this right hand forget her cunning, if I forget Rush Medical College!

Doctors are teachers. We now are both students and teachers, every one of us. Both our pupils and ourselves shall make pilgrimages to this as our medical Mecca. These are sacred walls to us; this is our temple. But there is being built a temple, a prouder temple, to scientific truth, and this not of bricks and mortar. This institution is part of its foundation; aye, I might almost say its chief corner-stone. Now and henceforth we are, and will be fellow-workers, co-laborers in this great work with you, sir, and your colleagues. We are proud of the age in which we graduate: the most glorious period in the history of medicine. This age, when the fair temple of medical science, from which the debris of the fallen battlements of ignorance has been swept away, stands on the firm foundation of anatomy and physiology.

In behalf of my fellow students I tender the faculty our warmest thanks. Our relations, as instructors and pupils, have been those of unalloyed pleasure, and although eager to enter the arena to battle for public favors, and to assert the truths we have been taught, the pleasure we anticipate is mingled with regret at leaving you and this place. But we leave feeling that we are better men from contact with such instructors; that we have imbibed not only medical knowledge, but also much from those high attributes of the human mind, humanity and philanthropy, which are no less essential to the success and existence of the physician and gentleman.

PROF. REA'S VALEDICTORY.

One of the commonest mistakes of mankind is concerning people. We seldom grade a man rightly. There are so many and such varied points to be considered in reckoning men, that but few hit their exact value. In deciding the merits of a piece of mechanism, an acre of land, or a horse, there is little difficulty; but in man we have qualities and circumstances to estimate entirely absent in Dexter or an avenue lot.

We either call a man weak when he is strong, or strong when he is weak, or very able when he is medium, or feeble when he is tolerable. Two classes we invariably misjudge — our friends and our enemies. The one is colored by the rainbow hues of attachment; the other clouded by the sombre shades of indifference or hatred. This erroneous adjustment of human worth depends on one of two causes — either a lack of ability on our part to properly estimate our subject's surroundings, how much he has to contend with mentally, morally or physically, in life's grand make-up, or an unwillingness amounting to preconception, bigotry or narrow-headedness to do so if we could.

We put a man up or down in the scale of merit, more often from the latter than the former cause, influenced by a moral color-blindness which eliminates all the shades not needed to form our ideal spectrum. Could there be invented a biological dynamometer, it would create much surprise and some fluttering, as the gaudy birds of paradise and the slimy polywogs of human society changed places.

In the present brief interview I desire to consider two or three of the erroneous views held by some concerning the profession, which embraces so large, respectable, useful, and talented a body of men as that to which you have been so recently formally introduced, hoping that our attention being directed to these misapprehensions we may be the better able to correct them.

No man, or set of men, can expect to be properly understood by every one, and I do not intend touching my complaining strings very strongly, nor to say that we are erroneously judged by every one or in every thing.

Conceding, as we must, that we have our defects in common with every other class of men, yet it seems to me there is a little additional zest given to the ridicule heaped on a physician, the sarcasm a little more bitter and pointed, the arrow prepared to pierce his foibles, follies, or faults, dipped a little deeper in the pungent, biting vocabulary of calumny and derision, and the appearance he presents, when the public tongue gets through with him, a little more deplorable than any other class to which the aforesaid public devotes its exclusive attention for any considerable length of time.

Perhaps this results from the expectations being too great, excited by the *assumed* pretensions of our branch of the liberal professions, assumed, not by us, but accredited to us as a ground for detraction when our success falls short of their absurd anticipations.

It need hardly be premised that we hold a place among the handiworkmen of human society second to none. The interests confided to us are as dear as the

dearest, the trusts reposed the most gigantic that fall to the lot of man to guard.

We stand as man's vanguard in the unequal contest with death. We also fight in a contest where we are certain at last to be defeated. However well or adroitly we conduct our forces, the fiat has gone forth that death must conquer, however long we may turn aside his shafts.

Often, from the weakly efforts of the enemy, or from skillful management of the defence in our hands, parrying the well-aimed thrusts as we stand side by side with our patient, and, perhaps, receiving the blow aimed at him, we succeed in baffling him so long that the confidence of those trusting attributes omnipotence to us; and when the stately tree that has so long breasted the storm, comes crashing to the earth, it shakes not only the ground on which it falls, but sends a reverberating shiver through the forest, creating distrust in those whose power, though long successful, has succumbed to the inevitable, and the distrust is usually proportioned to the past confidence.

Then, dissatisfied, slow to feel that we are less than the ideal of their own creating, a despondent apprehension gains the place of former faith, the throne they made and the attributes by which they surrounded you, are swept away like gossamer by the breath of death.

One of the most invidious and disparaging mistakes concerning our profession, and one that stands at the beginning of many others, is the opinion held by some, that it is a matter of the most sovereign indifference what medical man or system they employ, and send

the servant for a doctor as one would for a stick of firewood, and decide on a system as he would the color of his wife's dress or the direction he would drive.

This is most easiest shown in the readiness they change physicians, taking up with any conjurer, pathy, man or woman, who possesses and gives the assurance they desire, however unreasonable their pretensions may be, or stupid *they* may appear in embracing such a transparent delusion. Their want seems to be to employ some one professing to heal, expecting at the magic pass or word to take up their beds and walk, whether it come from learning or ignorance. In one of the reasons for this we find another erroneous idea entertained by the unskilled, that disease is a unit, like a lion roaming through the streets, and remedies the guns to destroy it; that medicine, in other words, is an exact science, like mechanics or mathematics—a given amount of disease in one end of the scales can be counteracted by a given amount of medicine in the other. This is a most unfortunate error, and observations in medical practice would lead us to infer that it is not confined to those outside the profession. Medical science is made up of certain deductions from a given number of facts, and the practice of medicine experiences with those deductions. We must first examine and understand the mechanism we desire to repair or preserve. After ascertaining the nature, qualities, and uses of the different parts, we can tell when each is acting naturally and usefully, and, knowing when it is doing so, tell when it is excessive, deficient, or deranged in its action, and the cause of it. We would find by experiment, and that alone, what

supports would stay any given part, what material might be added to or taken from any other part; what kind, quality, and shape of instrument would be suited to cut away an offending part or adapt it to others.

Medicine, then, is a science and an art, one consisting of a knowledge of the organism, and the materials used in its regulation, the other consisting of the ability to apply these agents, or remedial measures, to the cure of disease.

A knowledge of man, and the agents that influence him, shows that he is made up of organs co-related, that forces exerted on one part react on another, and no organ so remote that it may not be disturbed. How, then, can disease be an entity? A blow on one part may cruelly afflict another, and this widening influence derange or destroy the whole body. Load one wheel of your wagon too heavily, it gives way, the axle bends or breaks, twisting the bed, loosening the firm-fitting joints, and, if not speedily corrected, surely and quickly destroys the usefulness of this necessary adjunct of civilization. So disease induced in the stomach by an overload, speedily allows the brain to sway down, loosening the smooth monuments of joint, muscle, and mind, and were there no more chances for, or kinds of relief, than are offered by its inanimate prototype, the mysterious midnight trips to unfrequented localities, for which we get unjust credit, would be rendered superfluous, for they (the objects) would be plentier than missing men's bones in our janitor's cauldron; our roads would be strewn with old rack and ruins, ulnar and radial spokes, scapular

hubs, vertebral ridge poles, rib bows, cranial and pelvic feed-troughs, while here and there a bush would boast a cutaneous cover to shelter the belated carrion crow, whose arduous labors and press of business prevent its nightly return to the bosom of its family.

This idea of unity, carried to its legitimate inference requires a given medicine for each disease, and the idea stands at the basis of at least one system of medicine. Medicine from this is given with the idea that it goes through all the channels of the system in search of the invader, to overtake, strangle and destroy it.

The disastrous effects of such a belief, and its consequent results in practice, had better be left to the undertaker, whose legitimate business it is to deal with them.

And yet we find men indifferent, not to say reckless, in not investigating the relative value of men or systems, and the vast probability is, their opinions are guided in deciding the most vital questions in regard to life's best essence, good health, and all that makes life desirable, by those that in ordinary business they would not deign to notice.

What apology could a reasonable man offer for such carelessness in selecting his medical attendant? He would suggest want of time, want of suitable knowledge to decide, and perhaps come to my first assertion, if he had no other to offer, that it made little difference, so he was a doctor.

Would he select a clerk for his employ with equal carelessness? Would he employ a lawyer to conduct his most trivial case without evidence of his ability? If he did not understand law enough to decide on the

merits of his attorney, would he not devise some way to find, before he trusted him with finances, whether he were suitable to be trusted? He would know whether he had success in practice, had a diploma, and was conceded by the bar to possess talent, industry and honesty.

But how is it often when the question comes up, Who shall be my physician? Seldom selected until he is absolutely wanted, no time can be taken to decide on merit, and one is thrust on him, the quickest to be had, a sense of petty obligation binds him, and perhaps to the veriest pretender. Too often the decision is arrived at by the suggestion of some neighborhood gossip, to whose electioneering efforts her favorite owes what of success he has.

Suggestions, again, of friends, often influenced by any thing but sterling worth, serve to fix his easy decision, and the whims and caprices of some old splinter of feminine antiquity balances against all his better judgment. How readily he forgets, if he ever knew, that a majority of people, however intelligent or rational they may be on general subjects, are the blindest and most unreliable on subjects connected with health. Medicine is viewed and treated by them as a great mystery. Entrusted once to priests, it now seems removed but one step from the mystery of divinity, and this superstitious reverence of its patients requires tame submission to its mandates, the more mysterious the more impressible and valuable. Few persons escape entirely this influence. All remember the feelings of childhood as we looked at the old family physician, and believed him little beneath

the Saviour in his power to control disease, whose welcome presence was perfect security, and whose face was watched as an index of fate. And now carrying this feeling into life in a mitigated form, it stands as a great barrier to the use of sound judgment and common sense, so essential in any thing else.

Instead, then, of endorsing professional similitude and its miscellaneous value, it should be a matter of the most conscientious and pains-taking investigation who shall be guide and guard through the labyrinths of disease. He must also remember that men of like ability and professional qualifications yet differ in many desirable points, and while there may be no objection, even on account of his attainments or system of practice, there might be differences in secondary qualities which were invaluable to him. Of direct medical qualification he can of course judge but little, but observations will soon disclose to him — if he exercises half the tact and effort he does in his business — who does or does not understand what he professes. He will soon be able to decipher the cabalistic signs nature has marked in his features, and decide what she has placed behind to support his pretensions, whether he belongs to the grand army of helpers or the detested gang of hurters.

Another misapprehension concerning our profession, and one that tends to weaken the influence and lighten the esteem felt for the worthy medical man, is the expressed belief of a very large part of the community that the avocation we follow tends to blunt the finer feelings, sear the sensibilities, and render us indifferent to the feelings of others — in other words, sinks our

sympathies out of sight in our science. It is the old story over again, told of an undertaker engaged in coffining a man, who was interrupted by his unexpected return to life, and, wanting to know the meaning of present preparations, "Don't bother me," said he, continuing his work, "I'm busy."

Next to the fault of an unqualified physician, would I set the one of heartlessness. I presume the fully matured opinion of three out of every four persons you meet, is that physicians attend and care for their patients, with the same feeling a carpenter constructs his box, or an apothecary compounds his medicines.

This idea is so old and well formed, that I fear no words of mine can interfere with the cataract of opinion against us. If you take a pig and mix a portion of madder daily with his swill, at the end of a certain time his bones, if examined, will be found tinged with the madder. Instead of their pearly white color, you will find the reddish color of the pigment, and no washing will displace it, until the part is replaced by new bones. So with the majority of the world. They have fed on the idea of the merciless nature of physicians, till it has become deposited in their bones, and forms a part of their deep, unchanging nature. The worst element in this opinion, when well believed, is not the influence it compromises in community, but it reacts on the holder to his serious disadvantage.

Sympathy is an element of cure, it is a remedy for disease, and only those possessing or appreciating it can tell how potent. All know how different the feelings, as appreciated by different persons, under trials of any kind. One takes you by his kind, loving,

tender, and hearty sympathy, lightens at once your burden, by such apt, happy, cheerful, and hopeful words, that he lifts half the sorrow, and paints the other deep in the glowing colors of hope and cheerfulness. The other comes bustling with sharp, short, crisp, mechanical words, the expressions of sympathy freezing on his very lips, frigid as adamant, repulsive as death, plunging the shaft deeper instead of extracting one pang from your sorrow. Take these two men as physicians in the sick room, one inspires confidence and courage; the other disheartens, creating opposition and distrust.

What I maintain is, that this kind, humane sympathy, this innate devotion to the interests of others, this all-essential of the true physician, is possessed by our members in a degree, and to an extent held by no body of men of equal numbers on the broad face of God's earth.

If not, why do we as we do? Can it be for money? Could men be hired for money to undertake and undergo what we cheerfully do? Could you obtain for a few paltry dollars the services of a person to expose himself to storms on nights when life and limb are risked in the venture? Is there a man to be found who, influenced by purely selfish considerations, would freely expose himself to the horrors of small-pox, yellow fever, and cholera, in their most virulent forms? Are there men among us who would hire out to go to Sandusky, Norfolk, or New Orleans, to supply the help decimated by death, where the grim monster seemed to have set his seal on all living? No, there is something deeper and better in the hearts of the

brave men who have done this, and we claim that the higher and nobler motives which actuate them stand forth in living characters and practical forms in the glorious band of men, whose lives are devoted to alleviating the ills man credits to death. Money is well. It is a great comfort; but there must be some thing stronger of the good than money to call men out into such broad exposure. Man's selfishness forbids and must be counteracted by benevolence.

The mistaken idea of indifference arises partly from the necessary behaviour of surgeons. The surgeon who promptly and scientifically performs his operative duties soon secures names ranging from cool indifference to brutality. No matter how thoroughly competent and careful, yet he is simply Saw-bones.

Why, say they, he cuts as though he was amputating a stick of wood! Why shouldn't he? It is merely mechanical — his patient off to dreamland — shall he substitute crying for cutting, and let the well-springs of sorrow for the misfortune which has deprived a patient of a member gurgle up, trembling the hand he stretches to save? Standing as the arbiter to decide between worlds for him, should he stand simpering, while he should be staying the tide that ebbs his life away? Familiarity with suffering does not necessarily callous the sensibilities, and this is particularly true where our associations with it occur, as in ordinary medical practice, among our friends and neighbors.

In the medical department of our art occurs the greatest amount of censure, and more indignation is excited against us, as a class, by complainers with whom there is little the matter, who, in proportion to the

smallness of their ailings, are importunate to be heard, and woe to the doctor who has too much to do to hear the most minute and unimportant details of family history, ramified back generations, with all the delicate elaboration of an oft-told tale — the more restless you become, the more animated they, at last centering by one grand culmination in an "impression of the heart," or a sense of "empty goneness," *your* only regret being that it is not entire. It is never supposed that a physician is too busy to listen to such details, and, if there should be such dereliction, the complaints of the victim will do more to establish his reputation, by their continued, persistent repetition of the offence, than a dozen real causes for the opinion.

This opinion of our calling I consider very unfortunate, for it not only tends to detract from one of our most meritorious qualities, but injures the confidence which stands as the centre pillar of our fabric. What can we do without the confidence of our patrons? and what would undermine that so quick as to doubt your kindness, however much they might admire your professional ability?

Another mistaken idea concerning us is that we supply material for dissecting purposes by exhuming it. Nothing can be more erroneous. We are happy to acknowledge the aid of our city papers in dispelling that illusion by the timely suggestion that the large numbers of missing men of whom you have seen and read, have found their way into our dissecting room. It seems strange how it could have been discovered, as we have never told any one, and it is an axiom or proverb, I don't know which in this case, that "dead

men tell no tales." The fact is we have been overrun with missing men during the present session. A man, from some financial or domestic reason or fancy of his own, desires to be missing. He applies for admission to our missing department. We advise, expostulate, remonstrate, but if it all fail we take him in, but like the spider and the fly, he never comes out again. This will account for the crowd seen during the winter on our front door step. These were all missing men, and a remarkable fact in this connection is that when they came inside they could not be seen.

It is well for the city and surrounding country that they concluded to be missing, or some one else might. The way we manage our supply for the missing department, when volunteers fail, is this: We see a person that is well adapted to our purposes, and we send a polite invitation to join us, and he never fails to comply; we have a *pressing* way of urging him. We indulge our most trivial fancies in such things. If an operatic prima-donna appears, and our curiosity awakens as to how she manufactures notes of such fascinating quality, we send for her, and she is missing. This will explain the great number of artists who are missing from America within a year or two. Then, a ballet girl must have some peculiar anatomics about the tiny feet she spirals on so witchingly. This will account for the sudden disappearance of an entire troupe lately from our city, as we had to indulge the curiosity of our large class on the cause of their sprightliness. It is said, in further proof, that little pattering feet, like rain on a roof, can be heard gliding, fairy-like, through these halls in the small hours, and the irra-

diate form of "outdone" steps tiptoe from back to back of these seats, singing, with beckoning hand, "Come." Any one desiring to verify this can do so at three o'clock any very dark morning, by coming stealthily up the front steps alone. There are many persons in our city yet in danger. Intending, as we do, to investigate every anatomical peculiarity of men and women, not a few, we are thinking of inviting a dozen or two clergymen, in order to examine their eyes, to discover by what peculiarity of make the visual organ of one, looking at the identical page, sees things so entirely different from all the rest. One lawyer's tongue must be examined, to discover by what peculiarity in its construction he can tell the truth; and a similar organ in a lady I have heard of, who don't talk back; and also of another I *know*, who has some barbed arrangement about hers, so that when she pierces a person with it, she can drag out the largest reputation; and of an uncertain number of physicians' hands, who never write an unsuccessful prescription. Our General will be apt to receive attention, to discover what valvular arrangement he has about his mouth which allows him to draw such constant volumes into it, while the most ingenious devices of the most cunning politician can draw nothing out of it. I may add, as an explanation of the lack of the heaps of bones that would necessarily accumulate, that we sell them to the Western Elastic Sponge Company, who convert them by an undiscovered process into their commodity, and many are no doubt now enjoying the ballet troupe in another luxurious form.

One other misconception I shall allude to—the

counterpart of the first—the tendency to distrust all remedies, or medical infidelity. There are fashions in medicine as in mantua-making, and our mantua-makers have their busy seasons as well as the other kind, often finding it as difficult to becomingly dress their customers.

Different forms, sizes, and complexions require different colors, styles, and combinations. How absurd, as sometimes happens, a selection is made because becoming another, and when applied to them the short dress or pumpkin-seed bonnet is simply hideous. In the medical fashions we have similar ludicrous blunders. For some the simplest and silliest fashions are most suitable — they admiring, select substantial, valuable habiliments, exposing themselves to the ridicule of the *elite* of fashion, while another, whose honest form has never indulged the fancies of fashion, is betrayed into decorating herself with the blazing flummery she has admired on the head of some brainless beauty, till she looks like the elaborately decorated queen of an insane asylum. You can no more prevent a silly, senseless, lackadaisical, affected, aping, brainless woman or female man from patronizing a diluted form of nonsense in medicine, than you can interpret the intentions of our municipal phantom. In medicine, as in religion and politics, mankind seek their level. It is needless to expect to find all agreeing in any one way or method.

We notice certain classes of mind tend to certain beliefs. It is said in one form of religion that a majority of the membership patronize a certain medical fallacy. I have noticed, also, that some of the more

evangelical forms of religion tend to the more substantial and true in medical belief. Many men are so organized that they tend to all kinds of infidelity, while others tend to credulity for a similar cause. Ignorance, like muscular fibre, is of two kinds, voluntary and involuntary, with perhaps the third kind — mixed. The voluntary embraces neglected opportunity, and want of ability to obtain necessary knowledge, to accomplish something we have undertaken. The other kind, involuntary, covers that we need but can not know. This latter comes home forcibly to us, ignorant as we are of the causes of things which, if we knew, would be the key to many other unexplained facts.

Take the example of the nervous diseases which afflict the body, yet leave no traces after death, as we can discover, that they ever existed. The most violent form of neuralgia, that rendered the life a burden it would not take, leaves not a mark to show that ever a twinge of pain passed along its innocent-looking threads. In insanity what do our most intimate researches for the cause of this most fearful discord in Nature's thousand-stringed harp give us for our trouble? How certainly we know the brain to be the seat of mental action, and yet the connection of mind and matter is such that the exponent of the mind, the medium through which it acts, its work-shop, may totter and tumble, and yet leave not the slightest trace of disease's strongest touches. The deep secret of mind's relation to matter evades the most searching stroke of the keenest scalpel.

Take the blood, the great carrier of good and evil,

freighted heavily with concentrated destruction, where shall we find the chemist whose cunning filter is equal to its separation? or who can analyze the morbid element, tell us how it acts, and give us the antidote to counteract and destroy it?

One strong point made against us, is involuntary ignorance, and we acknowledge the fact, but by no means engross it.

The profession of medicine has always been regarded as a suitable target to discharge the sharpest calumnies against, when ignorance was the theme. That it suffers from this cause none deny who are acquainted with its composition. All occupations and professions do likewise, and we suffer no more nor less than they. Why, then, do we get credit for this vast amount of latent information? Why are we distinguished above the other liberal professions in this invidious particular? and why this distrust founded on it? One reason occurs to me in the difference, honest and dishonest, among its members.

Persons unacquainted with the principles of our science, can not see how we can differ upon any subject which, in their opinion, should be so straightforward. Disease, in their eyes, is a unit with its definite remedy, and when one physician cures a disease with a given agent, any other one differing must be wrong; and if both cure, then the whole thing must be a phantom. The differences of doctors has become proverbial, and I shall not contend that they have always been justifiable or profitable.

But a freedom of thought, the exercise of our strongest powers of reason, and most careful observa-

tion and analogy are alone consistent with the most successful and rightful practice of the art of healing, no matter who it causes us to differ with. We must be allowed the same diversity of means to accomplish an end as is granted to the other professions.

If a child is affected with croup, and one physician uses an emetic of ipecac; another one of sulphate of zinc, alum, lobelia, or tartar emetic; while another uses a bandage of cold or hot water, it must not be concluded that there is a mistake about the disease, and that neither understand it, because they adopt different means to circumvent it. It would not be said so of any other person employed, if in his discretion he showed a disposition to evade the beaten path, in hopes of finding some more easy or efficient way to do you good service; it would be taken as an evidence of genius and estimated accordingly; but in the physician it is presumptuous, it is tampering with health, and can not be tolerated. A lawyer requested to foreclose a mortgage may choose one of three ways to do it — by sale under the power of the mortgage, by a bill in chancery, or by *scire facias;* or to collect an amount due you, he may bring an action of debt or assumpsit; if your property is illegally taken or held he can bring an action in trespass, trover or replevin, the different remedies applied being varied by the circumstances of the case.

Religion or the hygienics of the soul may be resolved into this simple statement for its object: Man's goodness and purity, and the glory of God. Notice the diversity of means used for accomplishing these coveted conditions. How much space would be

required to express in their simplest form the points of difference between the religious sects, and their methods in detail, for correcting man's moral deformity. One applies water to him; another him to the water; another does neither; another believes in an instantaneous change of heart; another a gradual; another in neither. One believes in the Old Testament, another in the New, and another in neither, and yet if we take the test given by the highest authority for pure and undefiled religion, we find the most beautiful and pure lives coincident with all these teachings. As in our profession, so in this, we can not always distinguish causes from coincidences, and yet the fact remains. In this advocacy of liberty of opinion and freedom of election of means for given ends, I do not wish to be understood as proving too much, for I no more include the bastard offshoots of our profession than our legal friends include among themselves shysters, the fungus excrescences that deform, by their pestilential presence; the ancient and honorable calling they *mis*-represent, or would our clerical brethren Mormonism incantations and free-loveism, the low, degrading and diabolical inventions of bad men, as substitutes for the pure and simple truths enunciated in the best of books. These illustrations of diversity of method could be multiplied largely, but enough has been given to show that we have counterparts, and that it stands as no excuse for want of faith in medicine; and the commotions about the difference of doctors, whether in law, medicine, divinity or philosophy, only indicate an intelligent discrimination on the part of the men you select as your counsellors and guides — and not distraction, distrust

and demoralization. I would not be understood, however, as endorsing all the differences that arise between the members of our profession.

One of the most suicidal things our members are guilty of is the bitter, unprofitable, wordy wrangling in which they often indulge, sometimes with seeming plausibility on both sides, but conducted in a spirit any thing but amiable, candid, or fraternal. The effect is, that people conclude that when persons differ so widely, persistently, and fiercely, that truth lies in neither. One of the greatest causes of these differences is faulty observation. The observer don't use his eyes correctly. He is either blind, or cross-eyed, sees nothing, or sees one thing where another should be. By a primitive mistake in determining the disease, he builds a pyramid of additional mistakes in remedies for the supposed disease, and perhaps caps the climax by condemning the authorized treatment for the affection. Take a common symptom, such as pain through the chest. Now, you know this is but a single symptom, but may be an overwhelming one. It may be from one of several diseases. It may come from disease of the liver, lungs, pleura, spine, or rheumatism. Suppose a careless or ignorant man undertakes to name and treat the affection, and substitutes one for the other, confounds a pain through the chest from an overloaded stomach with a similar pain from pneumonia, and uses the active, depressing treatment of the latter for the former disease, and persists, as such usually do, to cover his mistakes. What will his opinion likely be of medicines? or what will be their curative effects? Suppose he mistakes causes instead of diseases. Take

dropsy as an example. We have it, as you know, coming as the result of several derangements—as the kidneys, liver, blood, or heart—and substitute one of these for another as the cause of the affection, and treat accordingly, the disastrous results need not be suggested to you.

Then, there arises an endless dispute over the effect of remedies, set down by one as invariably successful in a given class of diseases, and by another, if not hurtful at least inert. Take the war between prominent members of our profession on calomel and alcohol, what must the uninitiated think to see one member declaim against these articles as useless—worse than useless, and poisonous—while another challenges him to produce a case they have killed by them, and produce their scores that have been saved by their administration? Here is serious discrepancy and want of care in observation in some body, when prolonged and united experience is thus unceremoniously upset.

Newman Hall, the celebrated English divine, who recently visited America, having occasion to remark the infrequency of drunkenness among us, said he had seen but three or four intoxicated men during his entire sojourn. Bishop Clark came to a similar conclusion concerning Europe, having seen, as he said, during five months' experience there, but five men and one woman drunk; congratulated Europe and bewailed America as giving more inebriates than any similar number of people on the globe.

Here are men talented, and capable in their profession, yet how slow we are to believe that there were but the limited numbers in either hemisphere intoxi-

cated, and within easy reach of the unaided vision of the distinguished authors of these extravagant but erroneous compliments. We should circumscribe the area of ignorance, and particularly the kind I term voluntary; the other occupies far too wide a field to allow any additions from neglect, and with all the care we can exercise we are imperfect enough; and disease, often when pursued to its most remote fastnesses, evades our most searching efforts to discover its nature or treatment.

Mr. Stanley, one of the most eminent scholars and writers on the subject of bones, once amputated the limb of a young lady, for what proved afterwards to have been a hysterical affection of the knee-joint—this after making the most careful and thorough investigation. These discrepancies between physicians gives a rare chance for its opponents to deny its efficacy on account of its alleged uncertainty. Why, say they, doctors themselves can not agree concerning the effects of their remedies; where are their claims to our confidence, when they even admit that they can not always be certain what effects will follow their administration? We do not pretend infallibility, for our science is not an exact one; and the crumbs of comfort they seize from this seeming defect can be equally applied to every other not exact—and yet there are many aids to increase the prejudices arising from this cause.

A medicine may be exact so far as the influence is concerned, and yet some unseen influence may turn aside its good effects, and render unavailing our bravest efforts. These occult forces, uncounted among the elements of disease, often beyond the reach of the

most careful and educated observation, are parts of the grand reef upon which the small boats of our fleet founder. Men with such weak tethering may "Autocrat a breakfast table," but can't captain the tiniest craft that skims our sea, in the great crusade against life's grand enemy. Difficulties of this kind surround and frustrate us when success seems easiest, and yet uncertainties are not novelties in any pursuit of life. How few callings are exempt from them.

The farmer, as he spreads broadcast his grain and labor, forms little idea what harvest will bring. The herdsman little knows what disease may ruin his brightest hopes at the most unexpected moment. The merchant, as he despatches his precious cargo, never takes the return invoice till the sails of his giant servant are safely reefed in the home harbor. The minister, as he pours forth his burning words fresh from the deepest recesses of his feeling heart, never can reduce the result to mathematical calculation, and is as ignorant as ourselves, no matter how deep the dose of sulphur, what psoral counteracting influences are at work to neutralize his most earnest, true and hearty labors. Even the law, the profession founded in precedent, is proverbially one of the most uncertain of all. You canot predict with certainty the issue in the simplest case, whether, when you bring suit for your fee of three hundred dollars, employing the best legal doctor, that the defendant may not perjure himself, transparently to judge and jury, and yet they may reduce your claim one-third. We are not exempt from uncertainties in our expectations of the effects of our remedies, but it is not peculiar to us. We have no

means of analyzing a remedy that will tell beforehand its effect on the human system. This can only be determined by experiment, and, when its general and ordinary action is ascertained, there are sometimes those hidden stops that interfere and counteract what we have a right to expect. This is seen occasionally, in the form of an idosyncrasy, as some persons can not come in reach of the dust of ipecacuana without an attack of asthma, as others suffer from nettle rash from eating strawberries; and yet, shall we cease to smother the scarlet pellets in the saccharine-lacteal congelation, because one person in a thousand feels constricted about his throat, and millions of pins titilate his skin; or shall we cease to employ ipecac because, occasionally, instead of producing emesis it produces asthma; or sleep's step-brother, chloroform, because in an infinitesimally small number of cases the patient exchanges celestial dreams for heavenly realities? I think not. What a glorious harvest this uncertainty that mistily surrounds our practice gives to the guerillas, camp-followers, and buzzards who watch the sick as they stagger from physician to physician, with some helpless form of disease, expecting their prey as hope dies out and courage at last fails. Well they know when a man becomes distracted by the thought of hope lost he rattles the medical dice box with little care what turns up so it *promises* relief. All that a man hath will he give for his life, and with what desperate clutches he grasps at the least straw that appears able to delay his exit from his coveted home.

How sorrowful to see the utterly frantic efforts, and the vapid illusions used to bolster up the sinking hopes

of some hopeless invalids. Perhaps a man of strong intellect still unstrung by the grimy embraces of the fell destroyer, now a willing subject in the hands of some repulsive, ignorant, designing old crone, fed by her confident promises, while the hectic flush that mantles his cheeks is the rosy ornament that marks him for the eternal blooming. All that a man hath will he give for his life, even to his manhood, self-respect, and better judgment. What a crop of prejudice, bigotry, and superstition is fostered by this uncertainty, leading to mistaking a coincidence of cure for its cause.

It is one of the unbearable embarrassments you will be called on to endure. The gold chain around the neck will take the place of your best treatment for quinsy; the red woollen string around the little finger will cure more nose-bleed than all your *materia medica*. The blood taken by a splinter from an aching tooth, and driven into the north side of a persimmon tree, will cure more toothache than all your creosote. Warts can be cured by a stolen bacon rubbed over them and buried under the eaves, better than any remedy at your disposal, except you take a woollen string and tie as many knots in it as there are offenders, and bury it in the same place. Some remedy would long ere this have been discovered for hydrophobia had not the magic touches of the mad-stone rendered such efforts useless.

The inflamed palate, popularly supposed to have fallen, can better be restored to health and place by drawing on eleven hairs on the crown of the head, than

any thing you can devise, except you advise them to do as a patient of mine insisted she had—swallow it.

A gentleman of this city gave me as a fact, that an impression prevailed in the region in which he was raised, that when one of a family died of a given disease, if another were attacked the disease might be arrested by exhuming the body of the deceased relative, and causing the invalid to inhale the fumes formed from burning a part of the body of the deceased similar to that affected in the invalid, which many years ago was actually tried in the family of a relative of his, but, singular as it may appear, the consumption with which she was affected moved on uninterrupted.

But sad and discouraging as are these mistaken views of us, I do not think a true philosophy requires we should sit down and bewail our lot, in being misunderstood and misrepresented. A more excellent way occurs to me in endeavoring to so represent the profession in our conduct, qualifications, and successes, that a better respect will be accorded to us. The false impressions named are not always without some show of reason. When we so far lower by our voluntary ignorance and indifference the standard of our professional qualifications, and defeat instead of defend the efforts of nature to re-establish herself on the throne of health, thereby leveling ourselves with the counterfeits, what wonder we should be mistaken for them! Is it to be wondered at, that when we convert ourselves into the hard, pitiless, inexorable creatures some do, instead of softening by contact with suffering, that we are set down as cruel and unfeeling? or that

the rankling enmities brought about by our internecine contentions should stagger the faith of those who should trust us? or that an unskillful application of remedies, with the irregular result, should create susceptibilities to bad impressions of legitimate medicine, and tendencies to depart from the good old way and follow the gods of the heathen? But while there are reasons for these many opinions of us, there are also remedies. We have, as a faculty, been industriously and faithfully trying to place them in your hands during your term of pupilage. The only true remedy is the proper education of the members who are to mould and represent this great branch of the liberal profession. We have tried, as faithful guardians of the public, whose most serious and vital interests hang on your strength as medical men, to thoroughly qualify you to skillfully perform the arduous duties you are soon to assume, and at the same time to bar the entrance against all over whom a doubt could arise. We most willingly and heartily acknowledge the enthusiastic cooperation you have accorded us in this grateful task. We are led by our own experience to hope great things of you.

Instead of coming wheezing, breathless, and exhausted by your efforts, you came bounding into the arena, fresh and anxious for the contest, eager for a tilt with death, to try the temper of the Damascus with which you have been furnished. Bright as it gleams, symmetrically as it curves, handsome as it hangs, it must be judiciously handled to be made valuable.

You will have to guard yourselves in all ways to make the most of the talent confided to you. Temp-

tations inumerable lurk by the wayside to destroy, and the physician is exposed as no other can be; it is inseparable from his duties and relations, and will require all the moral courage of which you are possessed to defend yourself against those trials incident to your position. Often times the influence of others over you will be your weak point, and when a generous nature renders you the most companionable and welcome, you must be on guard against pernicious influences, and keep your hearts closed against friends and foes, when to allow them to enter paralyzes your self-control.

One of the first pieces of gratuitous advice given you by anxious and interested friends is, to get married. I advise you to do no such thing, unless you are so situated that you can properly care for the partner you select. It is one of the first thoughts in the hearts of most young men, and the burden of advice from all the old ladies, who will assume to advise you in matters of success; and this will be particularly true of those who have six or eight pairs of black eyes, of the feminine gender, about twenty-seven years old, and the more so if their chins begin to recede from their collar-bones, and their sterno mastoid muscle begins to ridge the surface.

Don't listen to them. There is no more necessity for, or obligation resting on, a physician to get married, than a carpenter, lawyer, or a dentist, what ever people may say about it.

Marriage is all well and natural, but entangled as most of the beginners among you will be, in the meshes of financial strategy, remember, two birds in a net only

disturb and batter each other with their wings, without benefit to either in their efforts to escape. First establish yourself, and then catch your bird if you can. Arms may answer for a while, but they must be used to drive the wolf away from the door, not to perpetually fondle the lamb. Palpitating hearts in your situation are pleasant—when you get a chance to prescribe for them. I am offering this to all the unmarried, unmoneyed members, fully aware how few will take it.

Out of all I see before me, I doubt not that for a large share of those single there is a little muffled drum beating to night, a delicate little hand, with beautiful taper fingers, pressing in anticipation the one in which she laid hers, with her little flutterer now beating triumphant marches through his future life. She will stand, like the sweet little angel she is, waiting the signal far down the prairie as the locomotive rounds the curve in sight, blessing the cars and track, engineer and conductor, brakesman and newsboy—all because they have brought you safe home again. The quiver of delight as she sees you first with those sparkling eyes, half ashamed of the total wreck they have made of her efforts at concealment, kindles blushes to add new evidence, if you needed any, of the devotion of this splendid little piece of dimity you intend to follow my advice and marry—as soon as you are able. But don't forget, if she loves you till she can't see, and you love her till your sight is somewhat dim, wait till the certain day dawn of success endorses the wisdom of your enterprise.

But if you are bound to marry her any way, give

her my love and the congratulations of the faculty, and tell her you have graduated in the largest and best class that ever left Rush Medical College, and you guess you will take the chances.

Don't forsake your chosen calling. There is nothing in the education you have received here that especially qualifies you to measure a yard of tape or an acre of ground, and the sacrifices bear no proportion to such uses. The disposition to leave the profession, I am pleased to say, is rare among our alumni, and of the few who do it, it is better they should. If you have selected your profession with the care you should have exercised at first, I advise you, as you value success, to stand firmly to your chosen avocation, relying on scholarly attainments and correct deportment to secure you the patronage you desire, however dark the future seems to spread before you. Change distracts and destroys a man's courage.

Bulwer has it:

"The man who seeks one thing in life, and only one,
May hope to win it ere life be done;
But he who seeks all things where'er he goes
Only reaps from the hopes which around him he sows,
A harvest of barren regrets."

Were I to sum up in one sentence, advice upon which to found your hopes of future success, it would be to feel and manifest a genuine, true, hearty, manly interest in your patients. I do not mean that step-motherly nervous anxiety, looking akin to retain instead of restore, but that devotion to the interests of your patients that needs no interpretation but your face. Possessing this you will possess all things, the

confidence and love of your patients, second only to the blissful realities of an entered heaven.

Gentlemen Graduates: This evening closes the pleasant relation of teacher and taught that have so pleasantly bound us together. Henceforth our paths diverge, and many of us part to meet no more this side the river.

Parting from friends always leaves a pang, the severity of which is proportioned to the pleasure of past associations. Taking this as a guide, the feeling that arises as we separate will be that of sincere, unmingled sorrow, for, as far as I am aware, not one act of yours has tended even to moderate the happiness we have always felt as your teachers, or the confidence we rightly feel in you. Your duties have been performed cheerfully, promptly, and successfully, and standing as you do, the largest class of graduates, if I am not mistaken, that ever left a Western institution, the spirit of emulation that has characterized you has far exceeded any of your predecessors—and I am happy to testify to the result in the superior qualifications that make you, I believe, the best as well as the largest.

We can congratulate ourselves, also, in the fact that death has not only not entered our beautiful temple' but that no serious case of sickness of any kind has occurred during this session, and I am spared the sad allusion I was compelled to make when last I had the honor of appearing in my present position.

It is related of the great musical composer, Beethoven, that "after having finished his great and only opera, his grand conception of character could find no counterpart in the real world. He could find no one

to personate his Leonora. The musical public and his friends urged the old man impatiently to give the result of his magical genius to the world. He obstinately refused, and finally silenced them by threatening to burn it if it was ever mentioned to him again. A young actress of wondrous power, with deep blue eyes, passionately and fathomlessly deep, possessing magnetic power, had just returned to Vienna, Wilhemina Shroeder, who had been performing in neighboring cities, and though scarcely seventeen years old, the most extravagant prophecies were made of her success. During his morning walk he invariably met this charming girl, who, unknown to him, was unnoticed. One day, during a thunder storm, she managed to meet him, and, going up to him, muttered some unintelligible words. Surprised to see her there, and at such a time, he bent down and asked her what she was doing out in such weather; had she lost her way? A sweet voice answered faintly but quietly, "I only wished to see you." "See me! For what can you want to see me?" "Your Leonora." He started; asked her name; she told him how she had tried to attract his attention; had to-day ventured to speak to him. "Did uou not see the storm? Were you not afraid?" Afraid of but one thing," said she; "that you would not give me your Leonora." Such artless and unaffected simplicity and gentle determination did their work. "Come to me to-morrow morning," said he, "I think I have found my Leonora." She went, received her instructions, gathered from his masterly hand all the accessories to a proper rendition. The part in which the test of her power was, where Floris-

tan, a prisoner of the Inquisition, is confined in a subterranean dungeon, whose location has been unknown for two years to Leonora, his wife, who at last, by strategy, gains admittance to him, but does not reveal herself. A plan is made to murder Floristan, by one of the officers of the prison, to conceal his oppressions; Leonora—or Fidelio, as Beethoven afterwards named the character—was by when the plot was about to be executed. At the critical moment she shielded her husband with her own body, and uttering this cry, "Kill first his wife," saved him.

A few weeks after this, when the opera was brought out, Beethoven sat in a little box near the stage. As the opera progressed, the sweet, powerful tones of the young singer reached his almost closed ear (for you will recollect he was almost entirely deaf), and cheered him. As the climax approached, he arose in almost feverish excitement; he gasped for breath, his form quivered, and his eyes were fastened on the singer's lips. For a moment she seemed to hesitate; suddenly she drew herself up in a truly magnificent manner, and dashed the vibratory thrill with the greatest passion into the much moved auditors. A miracle seemed to take place. The powerful effort penetrated every barrier, and reached the master's ear. Suddenly the whole work mirrored itself in the overwhelming sound, as the universe mirrors itself in a raindrop. The feeling of happiness overcame him, and this man, so strong in affliction, so accustomed to sorrow, fainted."

You, gentlemen, are each a Floristan, about to be imprisoned in the intricacies of our art, who have wooed and won your Fidelio (medicine), and are to

devote yourself to her as your future wedded wife. If you have been judicious and honest in your selection, and will truly and faithfully cultivate the virtues she possesses, she will prove to you a self-sacrificing, invaluable shield against all the malignant shafts sent against you, and at the right moment, will interpose herself to rescue you from the thickest dangers that gird your path through the mazy labyrinths of an imperfect science. We, as the authors of the work in which you are about to engage as characters, will stand as no indifferent spectators, while you perform your assigned role. The overture is ended, the call-boy at his place, the prompter waiting, the last bell has rung, and with what fevered anxiety do we see the curtain rise, and each of you move to his proper place. Only when you are fairly started will we breathe freely, and be quiet enough to enjoy. When your trial comes, and the faithful Fidelio interferes to save you, then, though we will be deaf from distance, let the loud sweet tones of your triumphs reach us even here, and fill us with the boundless, unspeakable rapture that comes from work well done, committed to high, deserving, and appreciative hands. In behalf of the Faculty who have taught, and the Trustees who have honored you, I bid you God speed, and good-bye.

At the close of the address the benediction was pronounced by Rev. Mr. Lathrop, and the exercises were then concluded.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—MARCH 1, 1868.—*No.* 5.

PHYSIOLOGY.

Investigations into the nature of Miasmata furnished by the human body in health (read before the Academy of Sciences, the 10th of September, 1867, *by Dr. Lemaire J. Paris).*

TRANSLATED EXPRESSLY FOR THE JOURNAL BY WALTER HAY, M.D.

(*Continued from page* 109.)

IN the first part of this work, I think that I proved that the confined air of the barrack and of the casemate, in which I made my experiments, contained a considerable quantity of microphytes and microzoa in process of development.

The extreme neatness of these apartments, and the recent whitewashing of their walls with lime, forbids the supposition that these little beings could have been furnished from dust or dirt accumulated upon the walls or the furniture.

The composition of the vapor of water collected in the exterior atmosphere near these barracks was so different, that one is forcibly led to the conclusion that the soldiers must have furnished them.

This is the object of this communication. I propose, to-day, to demonstrate what portions of the body give origin to them,

how they are developed and separated in order to be disseminated throughout the air.

The investigations, which I shall announce, have been made upon men and women from 30 to 70 years of age, and in perfect health.

Regions of the body where they exist. In the course of this work, I propose to demonstrate that the organism in action in a physiological state, in perfect health, not only does not furnish microphytes and microzoa, but that it destroys them. It is outside, upon the organs of the skin, and in the mouth that they are found in abundance.

Skin. It is known that the bodies of persons who perspire freely are covered rapidly with a deposit composed of different substances, and known under the name of filth (crasse). It is well known, also, that men and women who neglect those cares of the toilet which cleanliness and health demand, sooner or later exhale from certain regions a disagreeable or fœtid odor. The axillary, the ano-perineal, the inguino-scrotal, and the inguino-vulvar regions, the feet, especially between the toes, and the nails are in this condition.

If, after having cleansed these regions with the greatest care with the aid of a solution of saponine, perspiration is excited, and six hours afterwards the sweat is collected and examined with a microscope, there will be found, independently of little fragments of epithelium and of fatty matters, bodies spherical, ovoid, and cylindrical, similar to those whose existence I determined in the confined air of the barrack and the casemate. If, in summer, the washing of the above mentioned parts of men and women be neglected during forty-eight hours, and if perspiration be excited so that a little sweat may be collected, there may be established, except under the axillæ, the presence of bacteria termo and puncta, and of little vibriones. If the bathing of the same regions be neglected during fifteen days, the pasty substance which collects then exhales, about the feet and the genital organs, a fœtid odor. It reddens litmus paper faintly. In this condition, if perspiration be provoked and this matter be examined with the microscope, the

existence of the following bodies may be determined: epithelium, globules of fatty matter, some crystals, diaphanous bodies already spoken of, in great numbers; myriads of bacteria (bacteria termo, bacteria catenula formed of two, three, four, and even five segments); bacteria puncta; otick or wand-like vibriones of different dimensions, little spirilla-volutantes and ovoid monads of which some were excavated.

The fœtid dirt packed under the nails of the big toes, diffused in a little distilled water, contained bacteria and little vibriones.

The matter collected during fifteen days under the armpits, contained numerous ovoid spores and only a few bacteria-termo. It reddens litmus paper.

The dirt taken upon the anterior portion of the chest, the epigastrium, the abdomen, and the lumbar and dorsal regions reddened litmus paper strongly. I diffused it in a little distilled water, and found in it numerous diaphanous bodies, ovoid, spherical and cylindrical; also many round spores exhibiting a central nucleus, which made them resemble a piece of money; others ovoid, of which a certain number budded. Some were bi-lobed. The round spores were four to five ten thousandths of a millimetre in diameter. The dimensions of the ovoid spores varied from thirty-five to forty-five ten thousandths of a millimetre in length, and from twenty-five to thirty-five ten thousandths of a millimetre in breadth. I found there no animalcule, which appeared to me due to the strong acidity of the dirt. In the cerumen I found neither spores nor animalculæ.

These experiments are interesting, not only because they demonstrate upon the skin the existence, in great numbers, of the same diaphonous bodies, the same microphytes and microzoa, which I found in the vapor of water collected in the barrack and the casemate, but also on account of the difference which the different regions of the body present in relation to the production of species. The absence of microzoa in the dirt collected upon the skin of the trunk appeared to me to explain

the difference of odor between these regions and those where the animalculæ were developed.

These results confirm those which I obtained in my experiments upon ferments, in order to demonstrate that the order of appearance of infusoria is dependent upon the chemical composition of substances. This influence is so great, that I have been able to come to the production of microphytes where microzoa ordinarily are developed, and reciprocally of these latter in place of microphytes, by adding or removing one or several chemical bodies from a natural substance.

The existence of microphytes without microzoa in certain regions, and reciprocally the abundance of microphytes without microzoa in others, appears to me to be dependent on the different chemical composition of their secretions (sweat).

I can not too strongly direct the attention to the influence which the chemical composition of substances exercises upon the development of these little beings, because it appears to me to play the most important part in the history of transmissible maladies.

I shall now proceed to examine how these little beings originate upon the skin.

Physiologists affirm that a man in health, in a state of repose, loses, in twenty-four hours, about a quart of sweat. One who walks or works may lose from four to five quarts daily. Now this sweat, independently of the salts, of the fatty and the lactic acids, contains a perceptible proportion of coagulable albuminoid material. All these bodies form upon the skin a deposit, which accumulates every day. It is increased by the deposition of atmospheric dust, and of that which the clothing always contains. This dirt (crasse) is maintained in a humid state by the insensible perspiration and the sweat. It is in contact with atmospheric air and constantly submitted to a temperature of + 30° Centigrade (108° 32 Fahr.). All these conditions are most favorable to fermentation, and consequently to the development of microphytes and microzoa.

If a laboring man should secrete in twenty-four hours four or five quarts of sweat, his skin will then have received at the

end of fifteen the residuum of sixty to seventy-five quarts of sweat, to which must be added the dust of the air and of the clothing. If one reflects upon the quantity of infusoria which might be contained in seventy-five quarts of a liquid holding in solution albuminoid matter, it will occasion no surprise that I have found in this matter myriads of microphytes and microzoa. This is not all. The temperature of the confined air would increase several degrees by reason of the confinement. Moreover, the large quantity of watery vapor furnished at each instant by the lungs and by the cutaneous envelope soon saturates a limited atmosphere. Then the skin remains moist, often even covered with sweat.

All these conditions, doubtless, are very favorable to the development of these little beings, not only upon the skin, but also in the atmosphere in which their reproductive bodies are maintained by reason of their tenuity.

The miasmata which are disengaged from marshes, in warm countries, in which the temperature approximates to that of the human body, exercise a more prompt, and much more violent action than those which are developed in more temperate climates.

I have made experiments in the open air, at Paris, when the thermometer indicated +35° or even +36° Centigrade in the shade. Food, albuminous solutions and other alimentary matters entered rapidly into a state of fermentation. Twelve hours sufficed in order to develop in them bacteria and vibriones. It is therefore incontestable that this elevated temperature renders their reproductive bodies more vigorous, and causes them to arrive more rapidly at the adult state, since at a temperature of 15° to 20° Centigrade at least forty-eight hours is necessary to attain the same result. The elevated temperature of the human body may therefore hasten their development by rendering them more vigorous.

May it not be necessary to refer to this greater vigor, the formidable effects produced by the miasmata evolved from the marshes of hot countries, and by the human body in health? I postpone the consideration of this question; but will, at this

time, make use of the fact to explain the presence of animalculæ entirely developéd six hours after the condensation of the vapor of water collected in the barrack and in the casemate, as it will equally serve to explain why the vapor of water condensed in the open air, above the fortification, furnished animalculæ only after an interval of forty-eight hours. The temperature was only +16° Centigrade, and their reproductive bodies proceeded from another source.

Micrographs have long since determined that the blood and also the milk removed from the vessels, as well as pus, the remains of the food, and the pultaceous matters which collects upon the teeth, may contain a considerable quantity of micrizoa. The sweat which is supplied at once by the water of the plasma and by the sudoriprous glands, is in the same category as these liquids. Once deposited upon the surface of the body, it ceases to be protected by vitality, and becomes subjected to the common law, *fermentation*. As there is, strictly speaking, no fermentation without infusoria, such appears to me to be the origin of those which I have found in so great numbers upon the skin.

In the experiments whose results I have presented to the Academy, I have demonstrated that the gases and vapors disengaged during alcoholic fermentation and during putrefaction, carry with them into the atmosphere in considerable quantities of germs (propagules) spores and reproductive bodies of microzoa, and even of those little beings entirely developed. It is in this manner that those which exist upon the human skin, appear to me to be carried into the atmosphere.

I would suggest, that, at the present time, both in France and abroad, it is admitted by a great number of physicians that favus, tinea tonsurous, sycosis, and other diseases of the skin are the work of microphytes. These diseases, as is known, are transmissible. In the ages which preceded our own, and even now, physicians acknowledge that uncleanliness is the principal cause of these obstinate maladies. We have just seen that uncleanliness engenders microphytes and microzoa.

Here I am upon the domain of pathology, upon which I do not wish yet to enter. I will mention only, because all these facts are linked together, that I demonstrated at l'hôpital, St. Louis, the existence of spores of the achorion Schonbeinii in a confined atmosphere occupied by patients subjects of favus.

Mucous Membranes. The existence of infusoria in the mucus which rests upon these membranes has been indicated.

I have collected from several persons, in perfect health, nasal, buccal, pharyngeal, urethral, and vaginal mucus, and bronchial expectoration, and have found in them no infusoria. I have done more—I have preserved this mucus in little bottles corked with emery, in the presence of air, and I have proved that it resisted putrefaction for a much longer time than other organic matters.

These facts agree with those which M. Robin has observed. This skillful observer remarks that organic matters taken into the normal blood, resist putrefaction more than those collected in marshes.

After these facts, I am led to believe that the infusoria which have been found in the mucus have been developed under the influence of a pathological state, or of uncleanliness.

Mouth. I have stated that the existence of bacteria and vibriones had been recognized in the remains of the food, and in the pultaceous matters collected upon the teeth. I will add, that persons having carious teeth and irritable gums present moreover, in considerable quantity, spirilla volutantes and monads. There are few adults, otherwise perfectly healthy, who have not some carious teeth, some of this pultaceous matter, and who do not permit some remains of their food to collect between their teeth. It will be understood that those who breathe by the mouth would diffuse through the atmosphere some of these microzoa. It may be demonstrated in the following manner: let the products of respiration passed through the mouth of a man having carious and filthy teeth be directed upon a vessel filled with ice. The vapor of water driven

out from the lungs condenses there. There will be found in this liquid, independently of reproductive bodies of microzoa, bacteria and vibrones.

The two bacteria catenala, and the two vibrones which I found in the vapor of water from the casemate, at the moment of the condensation, originated without doubt from the dirty mouths of the soldiers. As I shall demonstrate presently that the vapor of water exhaled from the lungs contains no infusoria, it is therefore, in this case, the mouth alone which could furnish them.

Products of Expiration. It is generally admitted that the products of respiration contain organic matters, to which a very prominent part has been assigned in the history of miasmata.

In order to demonstrate their existence, the vapor of water disengaged by the respiratory organs has been condensed, by the aid of cold. This liquid has been left to itself at a temperature of twenty degrees, and some days afterwards it has been observed, that there was formed in it matter which remained suspended; it exhaled the odor of putrefaction. The same experiment has been made upon the air of dissecting rooms, of hospitals, and upon that of marshes. The same phenomena are produced. This matter has been analyzed in all these cases; it contained azote, but a microscopic examination was forgotten.

I have already demonstrated that the matter formed in the vapor of water condensed by this process, over animal matters in a state of putrefaction, and over the marshes of Sologne, is composed of microzoa and microphytes. That which was developed in the vapor of water collected in the barracks also presented a deposit formed of microphytes and microzoa.

Finally, in that which was condensed in the open air, there was produced likewise a deposit, but much less abundant, which may be composed also of microphytes and microzoa, or of microphytes alone, according to the locality. In an experiment which I repeated before M. Chevreul we established this last fact.

This matter, as is seen, is due, in every case, to the develop-

ment of living beings. When one has reflected that at the moment of condensation the liquid is limpid, and consequently contains no matters in suspension visible to the naked eye; that if it contained either albumenoid matters or fragments of tissue, the one and the other would be fatally destroyed and reduced to their elements by putrefaction, it is probable that one would come to recognize their true nature. In the explanation which is usually given of its formation and its mode of action, this matter ought at once play the part of ferment, decompose itself and develop itself, which is impossible. The demonstration which I have made appears to me to solve this question.

Independent of the facts which I have just reported, and which appeared to me of the highest importance in the history of miasmata, I have established also another which appears to me of no less interest; it is that no deposit is formed in the condensed vapor of water arising from the products of respiration, whilst the contrary is generally believed. Here experimenters have been led into error by their mode of operating.

I have just stated that a deposit, composed of living beings, was formed in the vapor of water condensed from the open air, and that the products of respiration which traverse the mouth carry with them microzoa. The deposit observed in this case is composed of the microphytes and microzoa contained in the mouth and in the air. By observing certain precautions which I shall explain, it may be demonstrated, as I have done in the presence of M. Chevreul, that not only there is no deposit produced, but that there are developed neither microphytes nor microzoa.

Observe how I make this demonstration: I cleanse in advance the entire buccal cavity and the throat with water containing two per cent of tartaric acid, which kills microzoa. I then wash all these parts thoroughly with pure water. I experiment in the morning fasting, in order to avoid the emanations from food, drink, etc., in the following manner: I inspire air through the nostrils and pass the products of expiration through a tube having a bulb surrounded with ice,

avoiding carefully the introduction of saliva. For this reason I hold one extremity of the tube between my lips. Twenty minutes suffice to obtain several grammes of condensed vapor. The liquid at the moment of its collection, contains fragments of epithelium, some very small globules, and some black grains, also small; these last appear to me to be carbon. This liquid, placed in a flask stopped with emery, has been examined with the microscope, every two days, in summer, during one month. It has never afforded either microphytes or microzoa, and remained limpid. I repeated this experiment ten times. It has always given me the same results. I have preserved this liquid for a year. It has remained as clear as at the first day.

I proposed to myself the inquiry, if these globules which were found in this liquid might not be the reproductive bodies of infusoria, which could not develop themselves in this liquid, by reason of the absence of food. In order to enlighten myself upon this point I made the two following experiments: To five grammes of this condensed vapor I added fifty centigrammes of albumen obtained from a newly laid egg. I made a comparative experiment with five grammes of distilled water and fifty centigrammes of this same albumen. The two flasks containing about six volumes of air to one of liquid, were shaken, stopped with emery, and left to a temperature which varied from twenty-two to twenty-five degrees Centigrade. I found no difference in the number, nor in the species of animalculæ which were developed in these two liquids, nor in the date of their appearance.

These experiments appeared to me to demonstrate that the products thrown out by the human lungs in health contain neither microphytes nor microzoa.

Now it remains for me to discuss the most difficult point of this question, that is to say, whether these little beings are the cause of typhus, of typhoid fever, of cholera, etc. I have already expressed my opinion upon this subject in 1861. But science demands facts. It is with facts that I shall undertake to solve it, if the Academy will still favor me with its courteous attention. (*To be continued.*)

CLINICAL CASES.

No. 1. E. M., age 25, female, presented herself for treatment, for large two-lobed fibrous tumor in the posterior clavi-culo-scapular region, of two years' duration. Incision was made, and it was found to be in two distinct lobes; firmly attached to the surrounding structures, clinging closely to the clavicle, and running across to spine; there was some hæmorrhage; all the arteries were preternaturally large. The entire tumor was removed, and wound dressed with Ung. Zinci. Oxid. She afterwards presented herself entirely cured.

No. 2. A. W., age 40, male. Has been a sailor, and on the coast of Africa had what is termed the "Guinea Worm." He states that a worm two inches long came out of his leg, below the knee. I believe the leg is bitten, and an egg laid therein, which is hatched within the tissue. When the worm attempts to make its exit, a small stick is passed under it, on which it is twisted, and thus drawn out. His leg is now much inflamed and swollen, and a cooling lotion was ordered to subdue the inflammation. I give this case as being rather a rare one in these parts.

No. 3. A case of exhaustion and death from hæmorrhage. J. S., age 21, male. Dec. 21st, was struck on right side of face and head with a lager beer mug, inflicting two wounds; one, two inches and a half in length, directly in temporal region, and one, one inch in length, just beneath the right eye. He bled profusely, and was carried to the hospital. The wounds were simply dressed with adhesive strips. Sixty hours after injury he left the hospital for his house, and in twelve hours afterwards was attacked with hæmorrhage from larger wound. Two hours after this I saw him and he was pulseless. His face was anemic. The bleeding was but slight, and the patient was scarcely conscious. He had evidently lost much blood, for I measured three pints, and could of course

get nothing like an actual measurement of *all* he had lost. It was impossible to ligate the bleeding vessel, for it was minute and deeply laid, and had retractred greatly. Monsell's solution was freely used, and hæmorrhage arrested. Stimulants and opiates were given freely to the patient, and the following morning he was comparatively in good condition. About noon hæmorrhage again set in violently, but was arrested by means of acupressure needle and compress. This wound bled no more, but the following day the smaller wound bled excessively before it could be arrested. Erysipelas supervened on the following day, marked with violent inflammatory symptoms and raving delirium. Bleeding now occurred from his gums and nose, and three days before his death hæmatamesis set in, which was only held at abeyance with five grain doses of Subsulph. Ferri. · The patent died from exhaustion from hæmorrhage occasioned by wounds. On *post-mortem* examination I found no signs of disease in any of the organs. The wounds had in no way communicated with the brain, and the orbital branch of the temporal artery was found severed. The brain was pale and bloodless; the tissues were all pale and anemic, and the thoracic and abdominal viscera were white and blanched throughout.

Yours, E. R. H.

HYGIENIC TREATMENT OF PATIENTS.

BY J. LITTLE, M.D., LE ROY, ILL.

THERE is a vast number of important and interesting subjects in the domain of medical literature suitable for essays, but the selection of one was the most puzzling thing I had to doin discharging the duty assigned me by the worthy president of this honorable.society. The principal reason for this was that every subject has been witten on by learned authors, and lectured upon by our medical teachers, so that any phy-

sician can turn to his library and open a book or journal, and read a more complete and able article than a country practitioner can write. It is for mutual improvement that we meet together, and I feel that it is the duty of each member to perform every task appointed him, and do all in his power to augment the interest and achieve the objects of our society.

I propose in this brief essay to say something about treating patients, as the treatment of every disease to which flesh is heir is fully discussed in our books, and I have not the vanity to believe that I have any thing new to offer on this topic, nor am I sure that what I shall say on that will be instructive or interesting. The treatment of diseases has been the great theme to which the attention of the medical savant as well as tyro has been directed from the dawning of the science of medicine to the present time. To be cured of their maladies is what the afflicted want, and hence it is that all other subjects pertaining to medicine are considered subordinate to this, and the treatment of disease with drugs, medicines, charms, electricity, etc., has always been the great business of the "medicine man."

The treatment of patients is a theme not often discussed by medical societies; at all events, it has not been my good fortune to hear any such discussion. It may be said that the patient is always treated in treating his disease. That he should be treated is a self-evident proposition, it seems to me, but that he is properly treated in even following the directions laid down for the treatment of diseases by such authors as Wood, Watson, and Eberle, is evident to any person of ordinary intelligence. The symptoms, causes, clinical history, anatomical changes, diagnosis, prognosis and treatment are dwelt on at length, and maturely studied, and occasionally a few casual remarks are made in regard to cleanliness, dietetics and nursing the patient. Emetics, cathartics, bloodletting, stimulants, tonics, epispastics, opiates, etc., are spoken of minutely and the case dismissed. The whole discussion has been about the disease in its various aspects, and hardly a sentence has been uttered concerning the poor patient. His

system is made the battle-field in which a war of extermination is waged against the disease by the doctor. Sometimes the struggle is fierce, obstinate, and bloody, and at other times it is exceedingly protracted, giving the combatants a splendid opportunity to display their tactics. To-day the physician seems to be master of the situation, and being encouraged he redoubles his efforts to drive his enemy to the wall, but on the morrow, when he revisits his patient, he finds that the disease has rallied its broken and scattered forces, and is making rapid and fearful advances. The gallant and faithful physician, believing his policy is right, determines to fight it out on "this line," and actively plies his pills, powders, tinctures, syrups, decoctions and teas, but still to his great astonishment the disease does not yield, but maintains its position with remarkable stubbornness.

The battle is now raging furiously between the doctor and the disease, each firmly fixed in his purpose, the latter to destroy the patient, the former to destroy the disease. Every organ in the body of the now prostrated patient bows submissively to the tremendous efforts of the physician to overcome his inveterate opponent. Finally, to make quick work of it, the doctor turns his heaviest pieces upon the strongholds of the disease, and accordingly fifteen grains each of *Calomel* and *Jalap* are sent rumbling along the alimentary canal to drive it out, a huge blister is applied over the spinal column or chest to draw it out, powerful diuretics or diaphoretics are administered to wash it out through the urinary apparatus or the pores of the skin, a pint or two of blood is withdrawn from the arm in hopes to capture it alive; and, while this bombardment is going on, the devoted doctor keeps his line of skirmishers well advanced, and maintains a continuous fire of small arms in the form of *Dover's powders*, *Sweet spirits of nitre*, *Paregoric*, *Rhubarb*, and tinctures and infusions of various kinds. And it sometimes happens that after the vigilant and untiring physician has completely exhausted his armamentarium, has fired the last round in the locker without any apparent effect, so far as curing the disease is concerned, and

has retired from the scene of action in disgust, the disease sounds the retreat and quietly takes its departure, leaving the patient to himself—and he gets well. The patient is amazed at his recovery; his friends are delighted, and the doctor is nonplussed, and blames himself because he abandoned the patient so soon. Occasionally, while the physician is deeply absorbed in fighting the disease, the patient succumbs, leaving his friends in doubt which killed him—the doctor or the disease.

Now what I charge against the science of medicine, as generally taught and practiced, is, that disease is treated to the injury and neglect of the patient; but this is not true to the same extent of late years as in former times. I do not mean that the profession has directed too much attention to the study of disease, but too little to the care, comfort, and happiness of the patient. In my humble opinion, the sick person should receive the first consideration of the physician, and the disorder should be studied and treated afterward.

Suppose a person has been sick a week or two, and has lain in bed, with only such care as one unacquainted with the science and art of medicine would bestow. A physician is called to see him, and stops just long enough to make out a diagnosis and prescribe the usual remedies for the disease. Every day the visit is repeated, and medicines of various kinds are left for the treatment and cure of the malady, to be taken in obedience to very strict directions. The case lingers, and the patient and his friends become discouraged; the attending physician is dismissed, and another one called. When the second one comes, he takes a general survey and a comprehensive view of every thing around and in the house; he scrutinizes the bedding and clothing of the patient, the room, and all its furniture; he inquires into the kind of food and drink taken; he observes the cleanliness of every thing, and the light and ventilation of the sick chamber; he asks about the company and attendants; in short, he carefully examines into every thing that has any bearing in the case, and then directs that every thing hurtful be put away, and that the patient be placed

in the most comfortable and sanitary condition possible. Then, unless the case is urgent, or there is a clear and positive indication for medicines, he leaves his patient without any in order to see what effect the changes he directed to be made will have by his next visit, when he will be more competent to decide what medicines to prescribe, if he should then think any are needed.

The scientific and conscientious physician makes haste slowly in treating the disease, but rapidly in treating his patient. He knows that the majority of sick people would recover just as quickly and surely without medicines as with them, if they were properly nursed and cared for. The charlatan teaches the people that they would surely die when sick unless they took medicines, and that all recoveries are attributable to them. The unprincipled fellow is always loudly boasting in public places of his ability to cure all diseases with his drugs and medicines. His heart is full of deceit and dishonesty; he has more brass in his face than brains in his head, and there is nothing too mean and contemptible for him to do in his trade of humbugging the people. It is among the ignorant in community that he has patrons, and what is needed to drive him and the vast herd of quacks and impostors that infest the land to honorable callings, is a general diffusion of knowledge. The regularly educated physician makes no pretensions, but modestly performs his professional duties, spending his leisure hours in study instead of gassing.

What is disease? Is it an entity or a condition? Does it invade the system of an individual as an enemy invades a country? Does it make its advances and attacks upon the organs of the body as an army does upon the forts, and cities, and territories of a nation? And must the physician proceed forthwith to fight the disease and expel it from the animal economy with powerful and hurtful agents, as the forces of a nation would drive an invading army from its possessions? Does the disease mean death and destruction to the patient, unless arrested in its career, or is it not rather a remedial effort on the part of the system to get rid of a morbid agent or process? Then if

disease is not an independent existence, bent on the destruction and death of the patient, but a morbid state of the anatomy and physiology constituting the standard of health, are we justified in treating it by introducing into the system of the patient agents that are poisonous, and always more or less injurious to the organism, to the neglect of other means of acknowledged value and innocence under all circumstances? Is not the heroic plan of treating diseases opposed to the present teachings of physiology and pathology, as well as all the natural sciences? It is now the teaching of our medical schools that many of the most common diseases are self-limited, and tend to recovery from the first if not complicated with drugs, and the day may come when it will be discovered that all diseases are self-limited and tend to a favorable termination. No physician will deny, I presume, that hygienic management of patients upon all occasions is safe, proper, and necessary. Then is it not always better to travel a sure road, though it may not be the shortest one, to a given point, than to attempt to find a nearer one by wading through muddy water of unknown depth, and run the risk of losing your life?

We are taught that there is in every organized being a certain conservative power which opposes the operation of noxious agents, and labors to expel them when introduced into the system. This power has long been recognized; it is the "vis medicatrix naturæ" of Galen, and we all court its favor. Were it not for this power, sickness and death would be far more common than they are; nay, they would claim undisputed authority over every creature at the very threshold of animal life. Thus the natural tendency of organized bodies is to health and life, and not to sickness and death. Occasionally the causes of disease are too numerous and powerful for the conservative power or resistive force to repel, and sickness is the result. Or, in other words, the individual has violated the laws of his being to such an extent that an unnatural or forced state of his organism takes place, which we call disease. "The laws of nature are fixed and poison kills."

From the moment a female conceives, to the time when the

fruit of that conception shall die of old age, it is under the dominion of natural laws. All things that exist came into existence in a regular and lawful way, and they live and die in obedience to law. Man's body is governed by the laws of nature, like every thing else, and he can not violate these laws without suffering the penalty. A man may break a law of society, or a civic law, and hide the fact; or, if the fact is known, the doer may be unknown, or if he is detected he may escape conviction; but nature's laws carry their punishments with them, and the soul that sins must die. Men live under the great material laws of the globe in which we dwell, and there is not a material law that a man can break and not suffer. If a man eats and drinks to excess, if he keeps late hours and revels in fashionable indulgences that fill him with all manner of buzzing pains, he sins against his own body, and suffers the pains and penalties of his own transgressions. Men are almost without law in respect to air, food, over-taxation, and neglect of every kind. They are perpetually committing transgressions which are in time the mother of other transgressions. Many social infelicities, such as irritableness, an unhappy temper, moroseness, are frequently the concomitants of simple indigestion or overwork, or an unduly excited state of the nervous system. Thus men begin by violating the laws of God in the body, and this extends to the violations of the laws of God which regulate the disposition, and these involve a great number of moral traits, and the ramifications are infinite. If a man rides or sleeps in a car or a chamber that is unventilated, or lives in a damp dwelling, and if pains and aches overtake him, if vertigo seizes him, if his brain is poisoned, or if inflammations and rheumatisms ensue, it is in vain for him to go and implead nature, "I did not know I was doing wrong, and I will not do it again." Neither his protestation of ignorance nor his promises of obedience will do any good or make a particle of difference. A man that breaks nature's laws must take the penalty. If a man swallows a dose of poison, it makes no difference that he can prove that he did not know that it was poison, it will destroy his life just the same.

The laws of nature are as immutable, beneficent, and ubiquitous as God their author, and every thing in the universe is governed by them. Every thing in existence has its function to perform, its destiny to fullfill, and as long as it obeys the laws of its being it will be well with it, and when it disobeys these laws it will suffer the penalty. I will then lay it down as a truism, that if an organized body obeys the laws of its being in every particular, it will run its course free from any punishments. No man is so foolish and wicked as to believe that the painful occurrences of this world come by chance, or are inflicted by the Great First Cause for amusement, or to appease his wrath. Then what we call disease comes as a penalty of violated laws, and is a legitimate production or sequence. All diseases are preventable if taken in time; and when a person is sick, he, or his parents, or his neighbors, has violated the laws of nature. Many a man goes on trampling on the laws of his body, and because the penalty is deferred, he thinks he is innocent, but by-and-by the punishments come down upon him. The punishments for the violation of natural laws can never be evaded, for they are self-executing punishments.

Believing then that diseases are the penalties of violated laws, which have we to deal with—the patient or the disease? Which is the active, responsible, intelligent object? If a man contract typhoid fever, variola, or pneumonia, he is to blame, not the disease. This comes as the consequence of trespassing against nature. The man attacks the disorder instead of it attacking him.

We hear a great deal said about diseases attacking people, as if they were rational, ferocious beings, existing some where till an opportunity occurred for them to make an attack upon some unlucky person who happened to go that way. The people have learned this language from the doctors, I presume; and you will hear them tell that a certain boy or girl, or some other individual in the neighborhood, was attacked by the measles, scarlet fever, or ague, and almost killed. The popular notion being that diseases are independent existences,

going about the country in a similar manner and for a similar purpose as that individual spoken of in the Scriptures; as soon therefore, as an unfortunate person is attacked, a messenger is dispatched in great haste for a doctor, or some patent medicine, and an attack is at once made upon the ferocious disease, and immediately a fight ensues, which occasionally results not unlike the fight between the Kilkenny cats.

The physician's business is to cure the patient, or in other words, to take care of him till nature heals him. "Doctors cure but nature heals," is a maxim worth remembering always. How is the physician to cure the patient? Having a thorough knowledge of anatomy, physiology, chemistry, pathology and hygiene, and in fact of all the natural sciences, and comprehending the forces and processes of nature, and taking an understanding view of all the circumstances surrounding the patient, he will not be at a loss to know what is needed to effect his cure. The true physician has ever open before him the great volume of nature, and is continually conning its lovely and sublime lessons.

What law of his being has the patient violated to cause his sickness, is a question that suggests itself at once; for I hold that disease does not come by chance, nor is it self-imposed, but comes as a consequence of wrong-doing on the part of men. Not only must we inquire into man's relation to natural law, but his relation to the outside world, and to every thing affecting him. His age, occupation, nativity, parentage, temperament, food, clothing, condition, and in short, his past and present history in detail, must be known, and then a thorough rational and physical examination should be gone through with in order to find the nature, seat, and cause of the malady. This being carefully and methodically done, the treatment of the case will naturally follow.

It is a law in physics, that the cause being removed, the effect will cease; and this law holds good in a measure in the organic world. Then the first thing is to find the cause of the trouble and remove it, or remove the patient from under its influence. The relation which they sustain to each other must be broken

up. There is a law of growth, development, maturity, decay and death in the organic world, a beginning, a career, and an ending, and judging from analogy we would conclude that all the morbid processes we call disease are self-limited; and observation and experience prove this. From what has been said, the inference would naturally follow that the cause of the disease being separated from the patient, if too great injury had not been inflicted, and he placed in the most favorable condition as regards the laws of nature, he would recover.

Understanding man's relation to all things that surround him, to the air he breathes, the water he drinks, the food he eats, the clothes he wears, the light and sunshine of day, the darkness of night, to activity and rest, wakefulness and sleep, and the proper exercise of the faculties of his mind, the thoughtful physician will at once see the importance of putting his patient in harmony with nature's forces, agents, processes and laws. All things were created by the Supreme Architect before man was made, and they were created for man because he was given dominion over them, and there is a perfect law of harmony and adaptation between man and every thing in his dominion. It was never intended that man should be a delicate, pale, sickly creature, but hale, strong, prosperous, and happy. It was never intended that two-thirds of the human family should die before living out one-third of man's allotted years. A sick man is a nuisance, but a healthy one is a monument of symmetry and power. It is by going to nature that we get just and right impressions and ideas in regard to medicine, law, and every thing else. When people live in the enjoyment of all the gifts of nature in their purity, there health prevails; but when these gifts become contaminated, as in camps, cities, and on ships, there disease and death prevail.

When we look around us and see how people live, see what they eat and drink, and wear, see what kind of houses they live in, and how little they know of themselves and all the things around them, do we wonder that they are sick? The only wonder is that they are not more sickly, and that the

knell is not oftener heard. When people study themselves more and learn to obey the inexorable laws of nature, then will sickness decrease, and death will come at the end of a natural life in a natural way. Then is it not the duty of the physician to do all in his power to have anatomy, physiology, hygiene, and all the natural sciences studied as much as possible by the masses of the people. Prevention is a thousand times better than cure, is a truth which all should know, and believe, and practice.

(*To be continued.*)

CASES IN PRACTICE.

BY W. ANDERSON, M.D., LEROY, ILL.

CASE I.

Report of a Case of Instrumental Delivery.—January 23, 1868, called, in consultation with Dr. D., to attend a lady, *æt.* 36, who had given birth to seven children. Dr. D. informed me that when he was called in, labor had progressed for twelve hours; the membranes being ruptured, and the amniotic fluid having escaped. It was a shoulder presentation, with the head in the left acetabulum, the left arm protruding from the vagina, and very much swollen, so that the insertion of the hand into the uterus was impossible, while the force of the uterus was so great as to prevent an adjustment of the fœtus by bringing the head into the pelvis. The arm could not be replaced, and we decided an amputation unavoidable; after performing which, at the shoulder, the feet were brought down with some difficulty, thus saving any further mutilation of the infant, which, however, we knew to be dead before the operation. The knowledge of its death had no influence on our action, and had it been alive, it would have been born alive, in all probability, with one arm. Can some sage practitioner suggest a method of procedure by which such a danger may be avoided?

CASE II.

The well known pestiferous affection, so common in the West, and universal in the army, variously known as prairie itch, ground itch, army itch, etc., may easily be cured by such irritants or caustics as diluted sulphuric acid, corrosive sublimate, or white vitriol; or, what is more certain, the three combined, in the form of ointment, or solution; while all such applications as blue ointment, or Fowler's solution, are useless, or nearly so. This fact may be of use to many physicians, or all who use the latter remedies. The disease, which is exceedingly annoying, can be cured only by being killed in this way, and can not be neutralized, or driven from the system, or cured by alteratives, as many suppose. It is only second cousin to scabies, and *Sulphur* has no effect on it.

CARCINOMA OF THE STOMACH.

BY J. W. DORA, M.D., MATTOON, ILL.

I HAVE recently had the opportunity of performing a *post-mortem* examination (in company with Drs. Morris, Bridges, and Willcox), upon a case of carcinoma of the stomach, and it may be of some interest to the profession to learn something of the history of the symptoms, and of the autopsical developments, as such cases are comparatively rare in common practice, and very difficult to diagnose, on account of the obscurity of the symptoms in most cases (and, by the way, correct diagnosis is of more importance than any thing else in cancerous affections generally), as the treatment is utterly unavailing, and the prognosis universally unfavorable, in carcinoma of the stomach especially.

The subject of carcinomatous affection of the stomach was Philip Crow, age 51 years, native of Ohio, farmer and trader, of robust, healthy constitution, bilious lymphatic tempera-

ment; weight, ordinarily, 175 pounds; height, five feet nine inches; habits of life active. He first began to complain of gastric irritation early in September last, but had felt some dyspeptic symptoms for some three years previous, but paid no attention to it, attributing it to his irregular habits in eating, as he was almost constantly traveling by railroad back and forth to New York with stock, and eating hasty railroad meals, and losing sleep. During one of his visits East, in early autumn, he was attacked with pain in the stomach, nausea, and vomiting, which continued for several days, and was treated by some physician in the city of New York for gastralgia, and received temporary benefit. But not wishing to give a lengthy detail of the progress of the case, I will simply state that I learned from the patient, during my first visit to him, on the evening of November the 22nd, that from the time that the gastric disturbance began in September, he had constantly experienced a gnawing pain in his stomach, when empty, and a dull, heavy, aching pain after meals even of the lightest character, and, also, a very noticeable but marked feature in the case was a continuous pain, extending from the stomach to the left side of the chest and shoulder, so much so that the left arm became very lame. This symptom induced me, at first, to diagnose the case as neuralgia, and prescribed accordingly. There was also a peculiar capriciousness of the appetite, even while the patient was able to attend to business, and travel about, the peculiarity of which was a constant tendency to change diet, not relishing any dish more than two or three times in succession. The symptoms continued without any marked change, except the continued decline and emaciation. The tongue heavily coated with a yellow coat, and bowels obstinately constipated all the time; pulse ranging from 80 to 90; skin cool; no headache during any of the time, and free from pain in any part of his system, except the stomach and left chest. He was visited alternately by Drs. Morris, Bridges, Willcox, and myself, during the two months that he survived after I first saw him, and was treated for the first two or three weeks rather empirically, without success,

we merely treated symptoms; but about the expiration of a month, the emaciation enabled us to discover very distinctly that there was a tumor in the epigastrium, well marked, hard, and resisting to the touch, with considerable tenderness, and an undue prominence of the liver, and those of us who were visiting the case at that time pronounced it to be carcinoma of the stomach, with adhesions to the liver and anterior wall of the epigastric region of the abdominal cavity, consequently our treatment became merely palliative. The diet had been, principally, warm sweet milk, four to eight ounces, about five or six times daily, which sustained the vital forces remarkably for a time. Our prognosis, as given to the patient and friends, of course, was unfavorable; whereupon the patient, like all dying men, was anxious to have more council called in, and we suggested several eminent physicians of Chicago; viz., Dr. N. S. Davis, Dr. J. A. Allen, and Dr. Johnson. The two former not being able to make the visit, Prof. Johnson came down, and examined the patient, and corroborated our previous diagnosis and prognosis of the case. The patient very patiently awaited his final summons to the untried world, which transpired on the 19th inst., from inanition. *Post mortem* was made some ten hours after death: Rigor mortis well marked, emaciation very great. The contents of the abdomen only were examined. Upon opening the abdominal cavity, we found that the omentum as such entirely minus, what there was left of it was agglutinated, in puckered folds, to the transverse colon, and there were extensive adhesions existing between the colon and the scirrhus mass which had once been the stomach, and also extensive adhesions to the liver, spleen, and parietes of the abdomen, both anteriorly and posteriorly, and to the diaphragm. The pancreas was entirely obliterated, and converted into a nodulated mass, adhering to the posterior surface of the stomach. After removing the stomach with considerable difficulty, we could not have recognized it as said organ, had it not been that we were in search of it (*i. e.*), from any resemblance which it retained of that organ. The entire tissue of the stomach was

one scirrhus mass, involving all its coats on the posterior surface. It was nodulated and perforated in several places, yet the orifices were comparatively healthy. Neither the cardiac nor the pyloric were obstructed or constricted in appearance, that we could detect, but the caliber was very much lessened, especially in its longitudinal aspect; in fact the entire organ was contracted to about one-half its normal dimensions. And there was one other peculiarity discovered; viz., there was upon the entire track of the small intestines, as well as throughout the foliæ of the mesentery, small tuberculous-looking bodies, as large as a split pea, of a yellow color, which, I believe, have been named by some writers embryo cancers, or scirrhus lymphatic glands. The diaphragm and peritoneal lining of upper part of abdominal cavity were also thickly studded with these cancerous growths, if such they were. We were not permitted to remove any portion of the diseased tissue for microscopical examination, as we should like to have done, as it had been requested by the patient that no portion of his tissue should be removed from the body. It is remarkable that any human being could have survived so long, with such an entire arrest of nutrition, and such extensive lesions of the digestive apparatus, as existed in this case. But it may be attributed, in part, to the principle of vital tenacity, which we find very strongly marked in some cases, together with the small amount of nutrition derived from the milk diet, taken during the last two months of the patient's illness.

Mr. Editor please excuse the length to which I have detailed this report.

BOOK NOTICES.

OBSERVATIONS ON THE NATURE AND TREATMENT OF POLYPUS OF THE EAR. By EDWARD H. CLARK, M.D., Prof., etc. Boston: Ticknor & Fields.

This is a pamphlet of seventy-one pages, most artistically gotten up on tinted paper, and illustrated by two plates of

thirteen figures. It is divided into two parts; part first consisting of a record and analysis of twelve cases; part second entering into an elaborate "description of polypoid growths of the ear, and their treatment, based chiefly on the preceding cases."

EDITORIAL.

Back Numbers.

Thanks to the kind responses of our friends, we have received a sufficient number of Journals to complete the files of all who have applied for missing numbers in 1867. No more copies are needed, and if any who have written for extra ones have not received them, by dropping us a line they will be forwarded by return mail.

Circular.

Attention is directed to the following Circular, which explains itself:

DECATUR, ILL., Jan. 23d, 1868.

Having been appointed Chairman of the Committee on Obstetrics, by the Illinois State Medical Society, at its last annual session, I would respectfully and earnestly solicit your aid in furnishing material for Report.

A timely answer to any or all the following questions will be gratefully received and duly credited.

I desire to know:

I. The number of births that have occurred within your knowledge during the past year.

II. Number of males and females, and weight of each.

III. Number of abortions and premature labors, with causes which induced them.

IV. Number of still-born children, male and female, with causes. State time of child's death, whether before or during labor—if before, how long.

V. Number of children, male and female, born alive, who have died within twenty-four hours after birth.

VI. Number of cases prolonged *gestation*, with number of days beyond the ordinary period.

VII. Number of monstrosities.

VIII. Number of multiple births, with sex in each case.

IX. Number of cases of instrumental labor, with kind of instrument used.

X. Number of complicated labors, with nature of complication and results.

XI. Number of cases of hæmorrhage, before, during, or after labor, whether concealed or otherwise, with results.

XII. Number of cases of *adherent placenta*, with results.

XIII. Number of cases of *puerperal convulsions* occurring before, during, or after labor, with outline of treatment and results.

XIV. Number of cases of *puerperal mania*, with causes, treatment and results.

XV. Number of cases *puerperal fever*, with outline of treatment and results.

XVI. Number of cases *cellulitis*, with cause, treatment and results.

XVII. Number of cases of rupture of *womb*, *vagina* or *perineum*, with treatment and results.

XVIII. Number of new remedies applicable to puerperal women.

XIX. Number of new obstetrical instruments, or new improvements of old ones.

XX. Number cases of *atresia vaginæ*, with causes, treatment and results.

XXI. Number cases of inversion of uterus, with causes, treatment and results.

Any thing of unusual interest connected with Obstetrics, not included in or suggested by the foregoing, will be most gratefully received.

A prompt answer is very desirable. Every thing that will appear in the Report must reach me by the 1st, or at farthest, by the 15th of March.

E. W. MOORE, M.D.

Advertising Specialties.

Albeit in "goodlie companie," the Editor acknowledges being "sold" in a recent case. "For particulars see small bills," and the pages of a monthly contemporary in this city. An inch was given, an ell taken, whereupon our contemporary waxes mildly savage, and gives the takers the — *ell* with an aspirate. "Thereby hangs a tale," which we have not time, just now, to unfold; because to-day we descend from the tripod, throw physic for the nonce to the dogs, and, for a few days only, leave this great and wicked city, where the carcasses do so much abound which the eaglets, of the specialist variety alluded to, do scent afar off. We seek a breath of God's pure air, and on our return may launch an arrow at venereal and venal advertisers, not

forgetting a quiver full thereof at sundry others who advertise their professional wares under the foxy captions "Medical Education," or "Medical Reform."

Messrs. Bliss & Sharp,

144 Lake Street, have shown us a neat little *tubular cork-screw*, which seems well adapted for its purpose.

"By screwing the tap into the cork of a bottle containing soda-water champagne, or other ærated beverage, any quantity may be drawn off at pleasure, and what remains in the bottle will not lose its effervescing property. In this manner the contents of the bottle can be taken at pleasure, without extracting the cork, and all waste avoided.

Its convenience is so obvious, that we presume it will find its way into general use. The following directions are given:

"The wire must not be unloosed. Make room between the double wires on the top of the cork, by setting them aside so that the tap shall enter between them; then with one of the loose points on the end of the tap, screw it through the centre of the cork till the point of the screw is seen under the cork. Should the pressure prevent the point from dropping into the bottle, give it a shake, and the point will fall away. Hold the bottom of the bottle upwards, turn the stopper, and draw the quantity required. In this manner ten or more draughts may be had from one bottle. When the bottle is empty draw the cork out."

Duns.

Nothing is more disagreeable than a dun; but it has this ameliorating circumstance, that it has a certain prophylactic — PREPAYMENT. Several thousand dollars of arrearages are shown upon the books of the JOURNAL. The only way to collect these is shown, by experience, to be by duns. The editor is willing to *give* his time and labor to the conduct of the JOURNAL, but finds it indispensable occasionally to call upon subscribers for dues. As the invitation to pay up is general, he trusts no one will consider the dun as a personal insult. And if any are omitted in passing the collector's hat, it is hoped they will not, it indebted to the JOURNAL, consider it as a personal slight. Duns are sent out by business agents—if mistakes occur in transaction of business matters with several thousand different persons, it should aggrieve no one. "Sharp" letters

need not be penned, as all real mistakes will be most cheerfully rectified on simple notification.

Paris Items.

From a private letter we scissor these bits of medical gossip:

"Prof. Richet, one of the best surgeons in Paris, attempted to perform ovariotomy on a woman thirty-five years old. After working an hour, he found so many adhesions that he was obliged to discontinue the operation, dress the wound, and send the woman back to bed, where she will, undoubtedly, soon die. Truly the French surgeons have no success with this part of surgery. Either they can not do it properly, or else their subjects are bad, for they invariably die. Prof. Nelaton has discontinued his hospital service to be named, as it is said, Senator. He has been in great favor at court for some time, and probably Napoleon desires to honor him as much as his physician, Dr. Comeau, who, you are aware, has attained the Senatorial honor. Many changes have been made in the medical school within the last few months. Many of the venerable old professors having either died or been put *hors de combat*, to be replaced by a younger generation. Some of the newly-appointed, for young men, have already obtained much celebrity."

We regret to hear this report of M. Nelaton, after his previous dignified refusal to wade in the mire of politics. Alas for the great surgeon who

> "Born to a universe, narrows his mind,
> And to a platform gives up what was meant for mankind."

When a doctor meddles with politics, he should cease finding fault with parsons for meddling with physic. Which reminds us of the current rumor that *the* apostle of medical reform is, to the detriment of his Æsculapian robes, putting himself in training for the lower (if possible) house in Congress. It can no longer be said, "they do these things better in Paris." The probe that touched the bullet in Garibaldi's ancle has, unfortunately, proved a lever to hoist poor Nelaton into the Senate, and thence into professional eclipse and total obscuration.

Iodine and Carbolic Acid.

Dr. Percy Boulton, to remedy the inconvenience attending the external application of iodine and its preparations, has adopted the method of adding a few drops of carbolic acid to the iodine solution to be employed. The formula is as follows: Compound tincture of iodine, 8 grms; pure liquid carbolic acid, 6 drops; glycerine, 30 grms; distilled water, 150 grms. This carbolate of iodine is not perfectly colorless, so that it may be applied with impunity; and it is not only one of the most powerful antiseptics we possess, but is intrinsically a more efficacious agent than iodine alone. In the form of injections, gargles, and lotions, for sore throat, ozœna, abscess in the ear, etc., this preparation is a sovereign remedy.—*Extract from a letter in the Journal des Connaissance Médicales.—Med. Gazette.*

Gentian Root as a Dilator.

Professor Winckel, in Rostock, recommends (Deut. Klinik, 1867) the radix gentianæ rubræ as a new, simple and cheap means of dilatation for surgical and gynecological purposes. His attention was first directed thereto by an article of John Jacob Hacberl, published in 1834, in which the author states that, having operated for atresia uteri, and desiring to keep open the orifice made by the trocar, he introduced a good firm plug of radix gentianæ, and that on the following day he found no small difficulty in withdrawing the same, which had increased to twice its former size. According to Dr. Winckel's observations, the gentian root has the following advantages over laminaria: 1st, its cheapness, the ease with which it can be obtained, and the fact that the physician can so easily cut plugs and bougies of any size to suit his requirements. 2nd, its somewhat smaller power of absorption, as compared with laminaria, is compensated by our being able to obtain larger pieces of it (one and a half to two inches in diameter), so that

it can be used for the dilatation of openings already too large for laminaria. 3rd, the fact of its remaining free from smell constitutes an immense advantage, for even laminaria, though in a much less degree than sponge-tents, often becomes quite fœtid. The radix gentianæ may, therefore, be used with special advantage in strictures of the vulva, vagina, and uterus; for tamponing the uterus in smaller hæmorrhages, for the induction of abortion, for dilatation after operation for atresia of the genital organs. Whether it is also applicable to stricture of the urethra, to affections of the lachrymal ducts, etc., remains to be seen.—*Med. Record, from All. Med. C. C. Ztg.*, 1867.—*Medical Gazette.*

Dr. Maisonneuve has also an apparatus contrived by him for the purpose of removing the cause which most frequently occasions death after amputation. He maintains that the feverish symptoms, which appear in a variety of shapes, in all cases of wounds, and constitute the chief danger of surgical operations, are invariably the consequence of poisonous action. This, in his opinion, is owing to the fact that the liquids exuding from sores are deprived of vitality by contact with the atmosphere, then undergo a process of putrefaction, and are thus converted into dangerous poisons. He thence concluded that if he could prevent these dead liquids from becoming putrefied at the surface of the solution of continuity, the amputation of limbs might be effected without in the slightest degree endangering the patient's life. In order to obtain this result, Dr. Maisonneuve conceived the idea of subjecting the stump of the amputated limb to a constant process of suction, whereby the liquids might be abstracted as soon as they appear. For this purpose he has contrived a sort of india-rubber hood, which may be put upon the stump after preliminary dressing; that is, after the ligature of the blood vessels has been duly performed, the wound properly washed, and the borders kept together by means of straps of diachylon plaster, but so as not to prevent the exudation of the dangerous liquids. The hood, which, at its orifice, firmly embraces the stump, is provided at the opposite extremity with an india-rubber tube communicating with a tubulated balloon; which in its turn communicates with a suction pump. In this way, owing to the vacuum made, the obnoxious liquids are carried off, and the hood, collapsing on the stump, keeps the borders of the wound firmly pressed together.—*Cor. Leavenworth Herald.*

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—MARCH 15, 1868.—*No.* 6.

HYGIENIC TREATMENT OF PATIENTS.

BY J. LITTLE, M.D., LE ROY, ILL.

(*Concluded from p.* 176.)

DURING the discussion of typhus fever before the Academy of Medicine in New York city, a few years ago, Dr. Smith related the following brief history. During the year 1838, a vessel came into port, some where south of the city, with typhus fever raging among the passengers and crew to a fearful extent. The passengers and vessel were in a shockingly filthy condition, as the voyage had been a protracted one, and many deaths had occurred, though the sick received prompt medical aid. As soon as the vessel landed, the sick were immediately taken on shore, except four of the crew, who preferred to remain on the ship, as they had comfortable quarters and good attention. Tents and shelters were put up for the sick, and pure air, and good water and food were abundantly supplied. All were bathed daily, and clean, comfortable clothing and bedding were furnished as often as occasion required. Sweet milk, fresh meats and animal essences, and fruits and vegetables were liberally provided and administered to all. No medicines at all were given, except a very mild cathartic, or

an opiate, to a very few, and a little wine to the most feeble. The first night the patients were ashore, and before shelters and beds were provided, a heavy shower of rain fell, drenching every one completely, but the succeeding day being warm and sunny, every thing was soon dried, and the patients made very comfortable. The number treated on land was about sixty, if I remember correctly; and of these but three or four died, and of the four treated on the vessel three died. The sixty were treated hygienically, the four therapeutically; the sixty were removed from the cause of the disease, and placed in harmony with nature's agents and laws, the four were left under the full power of the cause of the disease, and dosed instead of nourished, and we have the result.

In the years 1863 and 1864, typhus fever prevailed in New York city, and the fever wards of Bellevue Hospital were filled with typhus patients. Sixteen of the house staff had the disease, and eight died; and sixteen of the attendants had fever, and nine died. These cases were all treated on the most approved and scientific plans, by the ablest and most experienced physicians of the city of New York. Stimulants, the mineral acids, quinine, etc., were freely used.

Prof. Hamilton had just returned from the army, and he conceived the idea of removing all the typhus fever patients to Blackwell's Island, and placing them in new tents and treating them on purely hygienic principles. This was accordingly done, and at the end of six months, a report was made by rof. Loomis, the attending physician, which showed a mortality of one in ten. No medicines at all had been used as *remedies* for the disease. Abundance of pure air was supplied day and night; all clothing, furniture, and vessels were kept scrupulously clean; the patients were bathed and well nourished, daily. Cheerfulness was encouraged, and every thing was managed on strictly hygienic principles.

This was a brilliant triumph of hygiene, and Prof. Loomis' report was commented upon largely, both in this country and Europe. This report was a history of an occurrence, and nobody could criticize or gainsay it.

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In the practice of many of our brethren, we see the disease treated most persistently and vigorously, to the almost total neglect of the laws of health and life. The patient is allowed to lie in the same bed, clothes, and room, from week to week; the doctor, in the mean time, making his daily visits, and prescribing pills, powers, drops, decoctions, etc., and giving strict orders how they shall be given, and not a word is said about ventilation, cleanliness, and dietetics. Treat a strong, healthy man as the sick are too often treated; confine him in a close room, in a warm bed, and deprive him of suitable food, and drink, and agreeable company and surroundings, and how long will he continue well? When physicians learn that all the natural agents essential to health and life, are to be supplied in their freshness and purity to the sick; when they learn what is good for a well man is not injurious to a sick man, they will treat their patients more, and their diseases less, heroically.

Why cram medicines down our patients' throats on every occasion? Is it treating our fellow citizens fairly to dose them every time they ask our advice? The physician who prescribes medicines when nothing is needed, in order to mislead his patient and make money, is too base to perform the sacred offices of the noble profession he is prostituting. Hundreds of patients have been destroyed by the drugs given them to cure their diseases. Is it not, indeed, astonishing what quantities of drugs and medicines are annually consumed by the invalids of our country? Patent medicines of almost innumerable kinds fill the shelves of the drug-stores in the land, and every newspaper has from one to four or five columns of advertisements and recommendations of these villainous compounds. Why is this? Is it not because the people have a ridiculous and superstitious faith in medicines, growing out of their ignorance of the science of medicine? Are not the physicians more responsible for all this than any other class of community? Who have kept the people in ignorance of the science of medicine, and taught them to have so much faith in drugs and medicines, if they have not? If the people knew as much of

anatomy and physiology as the doctors, do you suppose they would swallow every nostrum that is blown at them by quacks? They would not take medicines at all, unless prescribed by a regularly educated physician. Let physicians deem it not beneath their dignity to give the people all the information possible on medical topics, and they will have less faith in medicines, but a great deal more in the scientific physician.

Prof. Meigs says "a physician is not of necessity a doser, a drugger; and that in a large number of cases in which he is consulted, the patient will escape all physic and be cured by wise counsel. It is often dangerous to ask a physician the question what shall we do; because habit, custom, routinism almost always compel him to say take—take. Every one knows very well that a large variety of the complaints of pains, disabilities and fevers made by physicians, require for their removal only that the patient should know their nature, causes, and tendencies. The homœopaths treat multitudes of people by thus giving them not the least particle, but only the name of a drug, and all that recover under their guidance, give evidence of the great abundance of spontaneous cures."

I believe many are driven to homœopathy because they are tired of being drugged with massive doses of powerful medicines every time they are ill, or even "slightly indisposed." If there is such necessity for medicines, and they possess such wonderful virtues, why is it that the homœopaths, hydropaths, electricians, and others who discard them entirely, herald so many cures, and have so many followers?

If we would study nature as did the fathers of medicine, observe the natural course of diseases uninfluenced by drugs, we would soon learn that almost all diseases tend to recovery. Any experienced physician will acknowledge, if he is honest, that not more than one patient in five who consult him really needs any thing more than hygienic treatment. It is now admitted on all sides that the practice of our art is not nearly so heroic as it was twenty years ago, and it is also admitted to be more successful than then. The tendency is to conserva-

tism, and to dispense with these powerful measures so freely employed in years gone by.

Prof. Flint says: "It may be laid down as a golden rule in therapeutics, that active measures of treatment are only to be employed in cases to which they seem to the physician to be clearly indicated. The severity of the disease, and the danger of the patient, be they never so great, do not alone constitute grounds for the employment of active measures. If they are not useful they will be likely to do harm. The physician should be content with doing nothing when ignorant how to do good." These are truly golden rules, and there are many more such in Prof. Flint's new work on the theory and practice of medicine. In the treatment of all diseases he dwells more or less at length on their hygienic management, and in some cases he says, that "far more reliance is to be placed on hygienic than on medical measures of treatment." I have heard him declare, on more than one occasion, his preference for hygieo-therapeutics, if compelled to choose between that and therapeutics strictly so called.

Prof. Bedford, one of the most distinguished and successful practitioners and teachers of New York, always warmly urged the immense value of hygiene in the treatment and prevention of all classes of disease. All who have studied the writings of that illustrious physician of Scotland, Prof. Bennett, know what great stress he puts on sanitary and hygienic measures. I believe the leading medical men every where have more confidence in purely and strictly hygienic and sanitary agents and measures, than they have in drugs and medicines alone in the cure and prevention of diseases.

I heard a very learned and experienced Irish physician once remark, that he used but little medicine in his practice of late, and when he did use it, it was a good deal as cities use scavengers — to clean the streets, alleys, and channels of his patient's system. He said people were continually violating nature's laws, and bringing down upon them their penalties, and it was necessary to remove the obstructions to normal actions in the body, and this could sometimes be most speedily

done with appropriate medicines, but the cure of the patient was the work of nature, and the physician who did not avail himself of hygienic measures in the treatment of his patients was not wise, for in this field were his grandest and safest resources.

We learn from our journals, that some of the most scientific physicians of Germany and England are treating their patients with milk. This milk treatment seems to be gaining a good deal of popularity on account of its success and agreeableness. I read an article in the *London Lancet*, a short time since, in course of which the writer used the following language: "Milk, in the treatment of all fevers, is a valuable agent, especially in typhus and typhoid fevers. Drugs complicate and mask the disease. Leave as many cases of fevers as possible to their natural course, unaffected by drugs or stimulants. Patients with fevers must be fed, and fed often, and with milk. Sweet milk or butter milk may be employed. Withhold brandy and wine, and all alcoholic liquors, and give milk."

Dr. Parish, of New York, in an address before the Academy of Medicine, said he believed that many typhus fever patients had died drunk, and others of delirium tremens, so freely had wine, brandy, etc., been administered in the treatment of this disease. He said that over-medication was so common that it was next to impossible to study the symptoms of disease, and their natural history. Dr. Hooker believes that the typhus syncopalis of a preceding generation in New England, "was often, in fact, a brandy and opium disease." It is said that England's greatest surgeon, Sir Astley Cooper, once remarked that more harm than good is done by medicines, and other surgeons and physicians of renown have made similar remarks.

Everybody knows, who has ever taken a dose of powerful medicine, or has seen a person under its influence, that it is directly hurtful, though it may be indirectly beneficial.

A very able and facetious professor once declared that "medication without insuring favorable hygienic conditions, is like amputation without ligatures." He said, "throw out

opium, throw out a few specifics, throw out wine which is food, and the vapors which produce anæsthesia, and I firmly believe that if the whole Materia Medica, *as now used*, could be sunk to the bottom of the sea, it would be all the better for mankind—and all the worse for the fishes." Further on in the same address, he says, "but if the Materia Medica were lost overboard, how much more pains would be taken in ordering all the circumstances surrounding the patient, than are taken now by too many who do their duty and earn their money when they write a prescription for a patient left in an atmosphere of domestic malaria, or to the most negligent kind of nursing. I confess that I should think my chances of recovery from illness less with Hippocrates for my physician, and Mrs. Gamp for my nurse, than if I were in the hands of Hahnemann himself, with Florence Nightingale or good Rebecca Taylor to care for me."

Time and faith in God are the great panaceas for all the troubles and evils of this life. "What can not be cured must be endured," and there are diseases or cases that hygienic and medical treatment will fail to remove, and the patient will have to suffer on till death comes to his relief.

To study nature, to be in harmony and sympathy with her, to imitate her in all we do, to question her at every step, should be the aim and glory of the physician. The art of medicine is but the hand-maid of nature, and the true physician her humble, dutiful, intelligent and *free* servant. Then, gentlemen, with hygiene as our professional compass, and "*experientia et progressus*" as our motto, and having a living faith in the principles of Christianity, our paths through life will be thickly strewn with living witnesses of our usefulness and success as physicians, and our goodness as men.

CASE OF PARAPLEGIA:

The result of slightly depressed bone over the fronto-parietal region of skull, caused by musket-ball. Operation of trephining and cure.

BY CHAS. M. CLARK, M.D., LATE SURGEON 39TH ILLINOIS VOLS.

M. F. S., late private of Co. E. 39th Ill. Vol. Infantry, was wounded August 15th, 1863, in front of Fort Wagner, S. C., by a conoidal ball, which struck the left side of head, impinging on the "os frontis," near the coronal suture, one inch and a half from the apex or crown of the "os frontis." Simple dressing was given at the time of the wound, and the scalp healed readily. After the scalp wound had healed, he was placed on light camp duty, and evinced no bad symptoms from continuous daily labor.

January 1st, 1864, he began to experience a feeling of numbness in his privates, nates, and right limb, which increased and extended to the left limb, and at the same time he commenced to suffer with difficulty in voiding his urine. He sought medical advice at this time, considering that he had the *gravel*, and went to a Mrs. Dr. Waiscott, Kankakee, Ill., where he was subjected to a bathing process for a period of seven (7) weeks, without any good resulting. Then he consulted Dr. Fox, of Washington, and also Dr. Johnson, who gave him an examination, and pronounced his disability to be "a general disease of the spine," resulting in paralysis. (It is due to Dr. Johnson to state that his patient, at this time, had not told him of the injury to his head.)

When treatment was commenced with Dr. F., the numbness was all confined to the right limb, but was commencing in the left; also, had lost control of his bowels, and had great difficulty in passing his water. He then tried a galvanic battery, which, as he states, "would relieve him for a few moments, and then would be as bad as before."

He went to Dr. Johnson again, and was stripped for examination. The Doctor gave him a thorough physical examination, and pronounced him sound in his "vital organs." The patient then stated to the Doctor the fact of his having been wounded in the head, and the Doctor, *after* examination, stated that an *operation* would be necessary in order to relieve him of his trouble.

At this time, a Dr. Rainford, of Kankakee county, wished him to remain and be experimented upon with the galvanic battery and air-pump, holding forth inducements of permanent benefit.

The case was brought to me November 27th, 1867, for examination, and after a thorough inspection, it was decided to operate by raising the portion of depressed skull as a means of restoration to a normal condition.

December 9th, 1867, he was placed under the influence of a mixture of chloroform and ether — the hair shaved from the part, and a conical incision made through the scalp, and the flaps turned back. The periosteum was then scraped off and the trephine applied at a point that would cover the whole of the depressed bone. He was allowed to recover from the anæsthetic before the section was complete, in order that when the bone was raised we might note more fully the result.

As soon as the circle of bone was raised, (which was one inch in diameter), he commenced the free use of a limb that had hitherto been useless, and expressed himself as feeling as "good as ever!" Sensation and motion had returned almost on the instant that the bone was lifted, and he kicked about joyously.

After dressing the wound he walked unaided to his bed.

December 10th. Is feeling very comfortable this morning. Advised a mild aperient, with a pulvis of *Opii et Potassæ Nitrat.* Cold water dressing to the head.

11th. Rested well last night, but this morning had a light chill. Gave *Quinine* and *Dover's powder.*

12th. Expresses himself as feeling first-rate. Sensation

and motion have returned almost complete, although there is some numbness about the perineum, but has no difficulty in controlling his urine or fæces. Removed stitches from the wound, which has united, excepting at the points of incision, where there is slight suppuration.

13th. Sleeps well at night; bowels move off naturally, and can control his water, which passes freely. Had some little vertigo in the morning, but soon passed away.

14th to 23rd. Is increasing in strength daily, and can walk easily and readily without help of cane—especially up and down stairs. Wound of scalp entirely healed.

24th. Went home to spend the holidays, and walked nearly three miles.

January 3rd, 1868. Returned to my care; has taken some cold, and feels weak; placed him on *Iron* and *Quinine*.

4th. The medicine gives him vertigo, and he loses control of his bowels and bladder.

5th to 10th. Discontinued the *Iron* and *Quinine*, and gave him *Brom. potass.* and the best of food.

13th. Came to my office to-day, saying that he feels perfectly well, and wants a plate fitted over the "hole in his head." Says that his animal passions have returned, and he wishes to go home to his wife. Has had no passion for a woman before since January, 1867, at which time the parts became paralyzed.

14. Went home.

It should have been stated, that the least pressure over the depressed portion of bone gave him very peculiar sensations down to the extremities of the toes of right foot.

When the skull was fully exposed and denuded of periosteum, the bone immediately over the depression seemed loose in texture, and blood oozed freely from it. The circle of bone raised was $\frac{1}{8}$ of an inch in thickness throughout its whole area.

A SUSPENSION SPLINT, FOR TREATING SIMPLE AND COMPOUND FRACTURES OF THE LEG.

BY E. A. CLARK, M.D., RESIDENT PHYSICIAN, ST. LOUIS CITY HOSPITAL.

THE great necessity for a well adapted apparatus in treating fractures of the leg, suggested the utility of the instrument I have designed in the following woodcut, which not only answers every practical purpose in treating this class of fractures, but also contributes very much to the comfort of the patient, who, while he is enabled to execute every movement of which the sound limb is capable, yet can not displace the fracture or modify the force of extension. In presenting this apparatus, I claim an advantage over those invented by Hutchinson, John Neill, Crandall and Salter, not only for the means of extension and counter-extension, but also its adaptation to the treatment of compound fractures of the leg, as represented in figure No. 2. And considering the simplicity of this instrument, with its cheapness and application to every variety of fractures of the leg, will certainly give it the precedence with those who may venture to use it in a single case. The apparatus is such as may be made by any blacksmith, or indeed by any ingenious surgeon in a case of necessity, when a wooden frame and two hoops, with a common iron pulley, will answer quite as well as the instrument which I have had made of iron on the following plan: (See Fig. 1.)

The two arches represented by the letter (H), at one end, are made of iron bars one-eighth of an inch in thickness, and three-fourths of an inch wide. These arches are continuous with the bottom pieces (K), which support them upon the bed, and measure twenty-two inches in length, making the distance between the two arches, which are also supported on the sides by the two slender bars (FF); while the bar extending across the top, upon which the pulley (P) glides, should

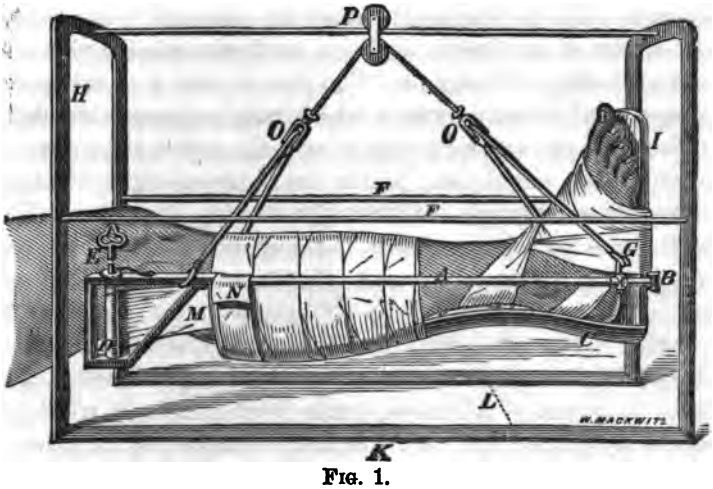


FIG. 1.

be made flat, with the long diameter perpendicular so as to prevent it bending with the weight of the leg. The width of the arch under which the leg is suspended, as indicated by the letter (L), should be 15 inches, and the arch 18 inches from the surface of the bed.

This description will be sufficient to indicate the proportions of the exterior apparatus. The bars represented by the letter (A), in which the leg is suspended, should be about two feet in length—unless when the fracture is too close to the knee, and it may be necessary to attach the adhesive straps (M) above the knee, then the bars may extend to near the perineum if necessary. The crossbar passing beneath the bracket at (B), and upon which the foot rests, should be flattened, and five inches in length, so as to allow ample space for the limb to rest between the bars; the space between these bars at the upper end should ordinarily be about six inches. The splint (C) upon which the leg rests in figure No. 1, should be fluted upon its upper surface so as to conform to the shape of the leg, while it is also made oval upon its under surface, so that both the leg and the splint may be included in the bandage shown in figure No. 1, by which means any displacement may be corrected in the fracture and the bones kept in perfect ap-

position. The foot-piece (I) should be attached to the posterior splint at an obtuse angle, so as to correspond with the natural position of the foot. The foot is bound to this piece by means of adhesive straps which may embrace the whole of the foot, and extend partially over the ankle, but not so as to arrest the circulation, as by the figure-of-eight bandage formerly used around the ankle for making extension. The leg then, as seen in figure No. 1, is supported upon the cross-bar passing under the bracket (B) attached to the foot-piece, and by resting upon the strap (N), pinned over the bars (A) on either side; while the extension and counter-extension is effected by means of the bar across the foot-piece below, and above by means of adhesive straps three inches in width, as indicated by the letter (M), which are attached to the sides of the leg, beginning just above the point of fracture and passing, up to be wound around the cylinder (D), which is three and a half inches in length, and turned by means of an ordinary clock-key, represented by the letter (E). This cylinder is held in any position to which it may be turned by a ratchet and wheel placed upon the upper surface of the bar, as indicated in the diagram—

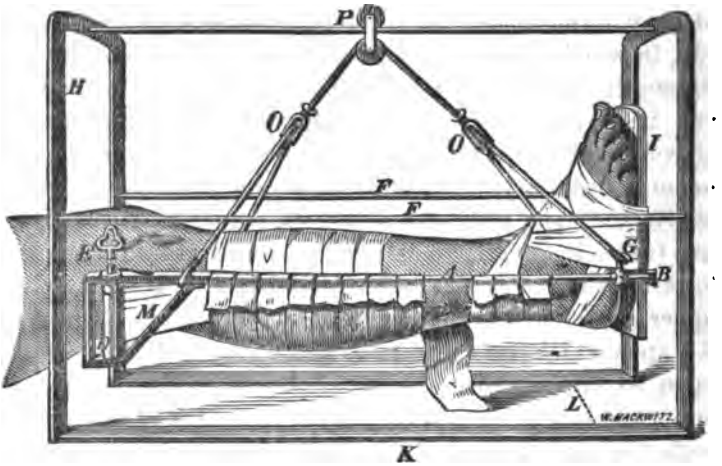


FIG. 2.

It will be observed in figure No. 2, that there is no posterior

splint as in the other diagram, but the leg is supported entirely by strips of muslin pinned over the bars on either side, which renders this apparatus more appropriate for the treatment of compound fractures in which the wound may be examined and dressed when necessary, by removing one or more of these strips, which may be replaced by new ones, without disturbing the fracture. The attachment of the foot-piece in this dressing does not in any particular differ from that of figure No. 1. The means of suspension is the same in both these dressings, which, by means of the pulley at the letter (P), the patient is enabled to move his limb, or even his body, forward and back to the extent of the length of the bar upon which it glides, and by means of the cord playing over the under wheel in the same pulley, the patient is able to flex and extend the knee by depressing or elevating the foot, which movement can be executed by a very slight effort on the part of the patient, while at the same time he can swing the leg from side to side to any extent within the space of the arches; and by means of the cords playing through the pulleys at (OO), the leg can be rotated to any extent, even to allow the patient to lie upon his side if he desires, without disturbing the fracture in the least. It will be observed in the diagrams that at the letter (G) there is a thimble, which can be made to slide upon the bar, by means of which the lower end of the leg can be elevated or depressed at the will of the patient, by sliding this thimble forward or back, and fixing it at any point by means of the little thumb-screw attached to this thimble. In developing the utility of this apparatus for the treatment of fractures of the leg, I have tried various means of attaching the foot at the bottom, such as the muslin and flannel bandages in the form of a figure of eight around the ankle, covering the foot also as far as the toes; but have always found them objectionable from the great amount of pressure, and consequent arrest of the circulation in the foot, though the flannel bandage is much less objectionable than the muslin. But I have been able to obviate this objection by the use of the adhesive plaster

attached over the front of the foot, and around the foot-piece, as shown in the diagram; this I have ordinarily found quite sufficient, unless in rare cases, when an unusual counter-extending force is required, it may become necessary—as very aptly suggested by Prof. Hammer of this city—to pass a strip of adhesive plaster beneath the heel and around the foot-piece, which adds very much to the strength of the dressing. I have recently treated six cases of fractures of the leg with this apparatus, in which both bones were fractured, and in which there was more or less shortening in each case, with excellent results in all of them, without allowing the least deformity or shortening, while the patients were all grateful for the comforts allowed them by this apparatus during their confinement.

SENILE GANGRENE.

BY JAMES T. NEWMAN, M.D.

I WAS called, the 3rd of December, 1867, to see an old lady, 99 years of age. She was suffering with gangrena senilis. On inquiring into the history of her case, I found that she had valvular disease of the heart, and that she had been laboring under the difficulty about twenty years. I also discovered that seven years ago she had an erysipelatous affection. She recovered from the last named disease, and enjoyed good health, until she contracted dry mortification of the right foot. The course of this terrible malady is too well known to require a minute description. Suffice it to say, that she had great pain in the toes, accompanied with a stinging, burning sensation. The limb did not swell much, but the whole foot and ankle soon became discolored, dry, and without smell, looking as black as charcoal. From the ankle upward it had a mottled appearance all over the leg. I also found the temperature of the member much lower than natural. Although this is called dry mortification, in this case there was a separation of the

cuticle, and a dark bloody serum effused into vesicles, as in acute mortification, and the bottom of the vesicles were dark colored and livid. The march of the disease was not rapid. In thirty-five days after the parts became affected, all the toes of the right foot dropped off at the second joint. At this stage of the disease it threw off a very disagreeable odor.

Her appetite is good, and she does not seem to waste as much as I had expected. I have described the symptoms and the course of the case up to the time of writing. Her pulse ranges between fifty-five and sixty. My *confrére* was called in; he commenced feeling along the tibial and fibial arteries up to the popliteal space, and finding no ossification of these arteries, asked me upon what did I base my diagnosis. I told him that I recognized a deficiency of the heart's action in the irregular beating of the pulse, and the difficulty she experienced in respiration. Now what are the causes of gangrena senilis? It has been generally supposed that there was ossification of arterial trunks, and sometimes we can feel very distinctly that the artery is ossified. The larger arteries are not invariably ossified in this disease. *Cruveilhier* always referred gangrena senilis to ossification.

There must be some unfavorable circumstance combined with the ossification, as impaired health, disease of the heart, or its valves, producing disorder of the circulation. Then the venous blood can not pass freely, and accumulates in the lower extremities, impeding the circulation. It is doubted by many good surgeons whether ossification of the arteries alone is capable of producing gangrena senilis. I think it is not. Among the causes I would name great universal debility, extreme old age, a thickening and ossification of the coats of the arteries, and a consequent diminution of their capacity, and of their muscular and elastic power.

To the case in question — having become satisfied as to the nature of the case, a good nutritious diet was ordered. I also wrote a prescription for an ointment, composed of the following:

℞ Goulard cerate, - - - ℥ ii.
Ext. conii, - - - - - ℥ ss.
Acidi. carbol. - - - - gtt. xxv.
Chloroform, - - - - - ℥ ss.
M. S. Apply pro re nata.

This mixture was used to control pain, which it did in a measure, but did not seem to arrest the march of the disease. I also directed her a half grain of *Morphia* three times a day. Under this treatment she seemed to get along comfortably until the 26th of December, 1867. She then complained of a heavy weight over the epigastrium, and costiveness. I ordered her a bottle of the *Citrate of magnesia*, which moved her bowels, but appeared to increase the pain in the stomach, and commenced to vomit every thing she ate. I called to see her on the 28th, and found that nothing would lay on her stomach. I gave the following about four o'clock in the evening:

Bismuth nitratis, - - - gr. 1.
Ext. nucis vomic alcohol, - - gr. 1.
Carbonate magnesia, - - gr. vi.
Sacch. albi —, - - - - gr. xv.
Oleo. mentha piper, - - gtts vi.
M. Sg. Divide in duas partes. Sumat unam statim alteram circa mediam noctem.

This quieted her stomach, relieved her bowels, and she seemed all right. I still continue the ointment, but give her plenty of good brandy. I have omitted the *Morphia*, because we only get the anodyne, but in *Opium* we get an anodyne, a stimulant, and an absorbent. I now have her on one grain and a half of *Opium*, given three times a day.

The 2nd of January, 1868, I took the knife and made five deep incisions, corresponding with the metatarsal bones, in order to give vent to the putrid matter in the cellular tissue. I consider the knife infinitely preferable to the uncertain and tedious method of procuring the detachment of the mortified

parts by suppuration; because it diminishes the bulk of the slough, and thereby abates the fœtid effluvia.

January 10th. All of the denuded bones have been removed. I was careful not to injure the living parts. The operation occasioned very little pain, and there was no hæmorrhage of any consequence. I am very confident that surgeons will reprove me for using the knife, but in this case the process of separation was so slow that I became impatient; I therefore departed from an axiom that was always considered by me as false. Besides following a maxim of Celsus, I preferred employing a remedy, though considered by some as uncertain, rather than abandon the patient to an inevitable death—*Satis est enim anceps auxilium experiri quam nullum.* The parts have taken on a healthy appearance, the acute and throbbing pains have subsided; the only sensation now experienced, is that of itching. Pardon me for trespassing on your space, but I attribute the recovery of this case to the prompt use of *Opium* and the *knife.*

MEDICAL ERUDITION.

FEBRUARY 14th, 1868.

DR. ALLEN:—The following is sent to you as a sample of the *erudition* of some of our compeers in the "theory and practice of medicine." The foregoing is a true *copy* "verbatim et literatim et punctuatim," of advice and prescription given to a person of this city by one, J. Dodge, who calls himself Doctor, (should be "*Doctus.*")

CHAS. M. CLARK, M.D.

Sylvester green Co Wis. Feb the 10 1868

Barbra Kiblen

your Lungs the Stronger they fill better your Liver is More Active the Digestive organs Do their office Work More freely The Stomach is Stronger the Stomach and Nerves Dont

Affect your head As much the Nervous system is Stronger the Uterin organs the Stronger.

Prescription

take two thirds of A table Spoonful of the Columbo. bitters a half hour before breakfast

for A Syrup one oz of Lifeeverlasting one oz of Yellow Dock Root one fourth of A oz Seneca Snake Root one fourth of A oz of White Pond Lily Root Put All of these in six quarts of boiling Water Simmer it to one quart then strain it & sweeten it With Loaf Sugar to take Add half A Pint of fourth Proof brandy take one table spoonful A half hour before before Dinner & Supper

the White of one hens egg onetable spoonfull of Loaf Sugar one table spoonful of fourth Proof brandy beat All Well together & take this quantity in the Middle of the Afternoon Drink Scull cup Tea With your Meales Make it Weak not not boil eat Light food Rub the orguinum Liniment on your forehead & temples, Morning noon and night, & smell of it the same time. Prepare the Linament As follows. one oz oil of oniganum half oz of Sweet oil half oz of Spiritz harts horn half oz of Laudanum Put All these together and apply it as Directed.

Prepare the columbo bitters As follows. one oz of columbo Root half oz of Rhubarb, half oz of extract Dandelion one fourth of A oz of Aloes. Put all of them in one quart of Whiskey & take it As Directed Continue these Medecines seven Weeks, then you are to be seen again.

examination & Prescription

by Dr J. Dodge.

PROCEEDINGS OF THE CHICAGO MEDICAL SOCIETY.

Abscess of the Brain—Disease of Kidneys.—Dr. Fenn exhibited the kidneys of a male patient, twenty years of age, who had been brought to the Cook County Hospital in a moribund condition. No satisfactory history of the case could be obtained. The urine was highly albuminous, the cerebral symptoms usually attending uræmic poisoning, being present.

The autopsy revealed great congestion of the kidneys, especially of the pyramids.

The brain was extensively covered with thick layers of lymph. On removing the cerebrum, a distinct fluctuation was observed in the right middle lobe. An incision disclosed an abscess, containing about an ounce of dark, fœtid, purulent fluid.

Internal doses of Chloroform in Delirium Tremens.—Dr. McDonald reported a case of delirium tremens, in which the patient had not slept for three days and nights. The ordinary remedies had failed to give relief, possibly in consequence of constant vomiting, which had prevented the patient from retaining them. There was great nervous prostration.

A drachm of *chloroform*, followed every three hours with a much smaller portion, soon restored quiet and rest. The disease speedily subsided, leaving, however, a very painful irido choroiditis of the left eye, which was subsequently relieved by an iridectomy.

Olive Oil in cases of Gall Stones.—Dr. Hatch exhibited several large gall stones, which had been dejected after large doses of olive oil. The patient had lost a mother and elder sister several years before from hepatic disease, in which the passage of gall stones was one of the principal symptoms.

The patient, a female about fifty years of age, had suffered

from frequent attacks of illness, with symptoms of gall stones. In June last, she suffered severe symptoms of the disease, which were relieved, after taking each night for three nights, a third of a large common bottle of olive oil. The several very large stones presented to the society, were passed at this time. She suffered, however, almost constantly from pain, jaundice, and impaired nutrition, and finally died on the first of January last.

At the autopsy, the common biliary duct was found almost absolutely closed. The gall bladder was indurated, atrophied and firmly contracted over two very large concretions.

Disease of the Kidneys, complicating tuberculous disease of Lungs.—Dr. Ross exhibited the lungs, trachea and kidneys of a patient, who had died at the county hospital. The principal symptoms were cough, emaciation, œdema of extremities and face, delirium, albuminuria, and vomiting.

The immediate cause of death seemed to be the complete exhaustion produced by the ceaseless vomiting.

At the autopsy, there were found extensive deposit of tubercles, with cavities in the lungs; the kidneys were very large and fatty; the trachea and ileum deeply ulcerated.

Abscess between the uterus and rectum.—Dr. Danforth presented the lungs, uterus and ovaries of an unmarried patient, twenty-two years of age, who had some months previously suffered from symptoms of peritonitis, and two weeks before death, from an acute attack of inflammation of the lungs, with obscure abdominal disease.

At the autopsy, the lungs were found studded with fine miliary tubercles, rendering the whole tissue like that found in hepatization. There were extensive tuberculous deposits in the peritoneum. The traces of the former peritonitis were observed in the firm adhesions between the ovaries, uterus and bowels. There was a large sack, partially filled with pus, between the uterus and rectum, and communicating with the latter through quite a large opening.

Death from Chloroform.—Dr. Powell presented an account of a fatal case from the use of chloroform. The patient, a

young man twenty-two years of age, was apparently in robust health, although he had suffered for a long period from caries of the tibia. An operation for the removal of a sequestrum was deemed necessary, and performed on the morning of the 15th of November last. Although the patient had been directed to take no breakfast, he drank a cup of coffee and ate a cracker.

The chloroform, manufactured by Messrs. Powers & Weightman, was administered from a folded napkin, by a careful assistant, its effects being closely watched by Dr. P., until the commencement of the operation, when it was discontinued. No stimulant was given previous to the anæsthetic. No unfavorable symptom appeared either before or during the operation, which lasted about fifteen minutes. At the close of the operation the patient made an effort to vomit, and on being turned upon the side ceased to breathe. The tongue was at once drawn from the mouth, water dashed in the face, and artificial respiration (M. Hall's method) secured for a few moments, when breathing re-commenced, continued about four minutes and again ceased. Renewed efforts caused the patient to breathe three times, but he again ceased to breathe, no efforts being sufficient to resuscitate him.

An autopsy, eight hours after death, revealed no satisfactory cause of the fatal result. There were a very few minute pieces of cracker in the right bronchial tube. The right side of the heart was greatly distended with blood; the right auricle was thickened; the left side of the heart contracted. The blood in the heart and large vessels was not coagulated. The other organs were in a normal condition.

Extensive Calcareous Deposit in the Pericardium.—Doctor Ross presented the heart and pericardium of a male patient, sixty-five years of age, who had died at the County Hospital. The symptoms during the last few weeks of life, were almost constant delirium, irregular respiration, at times almost ceasing, tumultuous action of the heart, although the pulse at the wrist was very feeble, general anasarca, and prostration. The patient died comatose.

More than two-thirds of the whole tissue of the pericardium were so filled with firm calcareous deposits, that the two halves of the membrane after the removal of the heart, retained their form like eggshells. The arch and valves of the aorta were also calcareous. The smaller arteries of the abdomen, limbs, base of the brain, and orbit, were converted to hard, inelastic tubes. The lungs were normal; kidneys atrophied, cysts being present in their substance.

Cavity in Lung communicating with the Pleural Space.—Dr. Ross also exhibited the lungs of a male patient twenty-seven years of age, who had died at the county hospital, after having suffered from symptoms of emphysema of lungs, and bronchitis complicated with albuminuria. A short time before death, the patient had suffered from great pain in left side. There was extensive anasarca.

The lungs were found to be extensively emphysematous and œdematous with tubercular deposits in both apices. In the left lung there was quite a large cavity communicating through a minute opening with the pleural space. Through this opening large quantities of purulent matter had escaped between the pleura, causing extensive pleurisy. The kidneys were very large and fatty.

Medullary Cancer of the Œsophagus.—The patient, a German physician about fifty years of age, under the care of Dr. Powell, experienced slight difficulty in swallowing. At the end of six weeks, he sought the advice of Dr. Powell, who found the œsophagus so closed that the patient was unable to swallow. For four weeks subsequently the patient was supported wholly by nutritive enemata, dying at the end of this period from exhaustion. The progress of the disease was more than usually rapid. The portion affected was about four inches in length near the middle of the œsophagus, its tissue throughout its whole diameter being implicated, and the passage absolutely closed. No other organs were affected.

Polypus of the Lachrymal Sack.—Dr. Holmes reported a case of polypus of the lachrymal sack which he had removed with the assistance of Dr. Weeks. The patient, a female

thirty-four years of age, had suffered two years from obstruction of the nasal duct, with the usual symptoms. Pressure upon the tumified sack produced a discharge of mucus and watery fluid through the upper punctum, without, however, causing the disappearance of the tumor. The exact diagnosis was doubtful. The tumor appeared too hard for a polypus, and not sufficiently well defined for a calcareous concretion.

After slitting the lower canaliculus, there was much more difficulty than usual in introducing the probes. Even after the stricture, which was situated near the middle of the duct, had been well dilated, there was, at times, great difficulty in introducing the probe.

There soon appeared a button of polypoid growth through the dilated canaliculus. The patient was advised to have the sack laid open and the tumor removed.

A couple of days after this, while in the act of blowing the nose, the patient suddenly perceived an inflation of the sack, followed by the appearance of a small tumor in the inner angle of the eye. This proved to be a polypus about a sixth of an inch in diameter, spherical in shape, and attached within the sack by a narrow peduncle. The removal of the polypus was effected without difficulty.

Serious Result of Forcible Dilatation of the Sphincter ani.—Prof. Davis stated that he had recently been requested to examine a young lady, who had suffered, as she stated, from perineal abscess, and subsequently, fistula in ano, which a surgeon had attempted to relieve by forcible dilatation of the anus. This operation consisted in introducing one or two fingers of each hand into the rectum and stretching the sphincter till its muscular fibres were completely ruptured. In this case, six months after the operation, the sphincter had remained absolutely paralyzed. The unfortunate patient was totally unable to retain the fæces.

Several members stated that they had witnessed the same operation performed for the relief of fissure of the anus, with relief of the disease without unpleasant consequences.

Dr. Davis also reported the case of a healthy laborer—in

which he had injected a few drops of strong solution of persulphate of iron in six or eight large varicose tumors, situated between the foot and knee. Hard coagula were speedily produced, one of which near the foot ulcerated and sloughed. In two weeks the patient was able to commence work, which he followed for two months without difficulty, although the coagula were not wholly absorbed. At the end of this period the limb became enormously swollen, very dangerous constitutional symptoms, as in erysipelas, supervening.

Under the use of the muriated tincture of iron and sulphite of soda, the patient recovered perfect use of the leg, although he was in a very dangerous condition several days, and large vesications and abscesses formed, from which were discharged large quantities of pus and *debris* of cellular tissue.

Correction.—In the report of the proceedings of the society in the *Journal* of last December, the word "other" should be substituted for the word "these" in the following sentence: Drs. Davis and Fisher reported cases of delirium tremens under the care of *these* physicians, which had terminated suddenly (in death) after large and repeated doses of *Tinct. Digitalis* had been taken.

BOOK NOTICES.

THE DIAGNOSIS, PATHOLOGY AND TREATMENT OF DISEASES OF WOMEN; Including the Diagnosis of Pregnancy. By GRAILY HEWITT, M.D., London, F.R.C.P., Professor of Midwifery and Diseases of Women, University College, etc., etc. First American, from the second London Edition, Revised and Enlarged, with one hundred and sixteen Illustrations. Philadelphia: Lindsay & Blakiston, 1868. Pp. 707. For sale in Chicago by W. B. Keen & Co. $6.

The first London edition of this book was received with

remarkable favor by English practitioners. The present edition has been thoroughly revised, and in great part re-written. In connection with the treatment, special attention has been paid to pathology. Sixty of the illustrations are original. Without being excessively voluminous, the book may fairly claim to present a very complete review of the important subjects comprised under its title. It is clear and compact, and the JOURNAL cordially recommends it to the perusal of the profession.

PROCEEDINGS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, at the Fifteenth Annual Meeting, held at New York City, September, 1868. Also the Constitution and Roll of Members. Pp. 453. From John M. Maisch, Penn., Sec. Am. Pharm. Association.

Copies of this important volume can be obtained in Chicago by addressing or calling upon our friend E. H. Sargent, corner State and Randolph streets, who has extra copies for sale for the benefit of the Association. It is a record of great industry, and should be in the possession of every druggist; while physicians will find in it much matter of reference which they can not readily obtain elsewhere — such as investigation of active principles, new remedies, improved modes of preparation or dispensing, etc., etc.

CONSUMPTION in New England and Elsewhere; or, Soil-Moisture one of its Chief Causes. Address delivered before the Massachusetts Medical Society. By Henry I. Bowditch, M.D. Second Edition. Boston: David Clapp & Son. 1868. From the author.

Dr. Bowditch's views are at present widely known, and their dissemination has gone far towards establishing the true philosophy of management of phthisical cases. The all-important thing is to have the patient change his climate — not to one cold or hot, but where, with moderate thermometric changes, the air is uniformly dry. No better climate can be found than the interior table-lands of this continent. If any-

thing will "cure consumption," it is the climate where the hunters do not have to smoke or salt their venison or buffalo meat, but where it dessicates speedily, without any taint of putrefaction.

REPORT Presented to the Ninth Annual Meeting of the New Sydenham Society, held at Dublin, Aug. 10th, 1867; with List of Works Published, and other Information. Richard J. Dunglison, M.D., Hon. Local Secretary, 116 Girard st., Philadelphia.

The annual subscription to this useful society is $7.50, in advance, (the duty, etc., payable on arrival of the volumes, amounting to about $2.50 additional.)

Mr. S. R. Wells, editor Phrenological Journal, has published:

THE GOOD MAN'S LEGACY; an excellent Sermon, by Rev. SAMUEL OSGOOD, D.D. With Portrait and Sketch of Dr. Richard Rothe, of Heidelberg. Price, 25 cents.

CONSUMPTION; Its Cause, and Cure by the Swedish Movement. With Illustrations and Directions for Home Application. By DAVID WARK, M.D. Price, 30 cents.

EDUCATION OF THE HEART; The Necessity of Moral Culture for Human Happiness. By Hon. SCHUYLER COLFAX. Sent post-paid for 10 cents. Address the Publisher, 389 Broadway, New York.

CONSTITUTION, By-Laws, and Code of Ethics, of the Chicago College of Pharmacy; with a List of Officers and Members. Organized and Incorporated, Sept. 5th, 1859.

From an accompanying slip, we learn that the College contemplates the institution of a course of lectures on chemistry, pharmacy, materia medica, and the collateral sciences, commencing October next. Thos. Whitfield, 281 State street, is chairman of the committee having the matter in charge.

EDITORIAL.

Rush Medical College.

Programme of Spring Course, commencing Monday, March 2nd, 1868:

Dr. Holmes, Mondays and Thursdays,	2	o'clock.
Prof. Blaney, " " "	4	"
Dr. Parkes, Tuesdays and Fridays,	2	"
Dr. Fenn, " " "	10	"
Dr. Owens, Wednesdays and Saturdays,	10	"
Dr. Lyman, Mondays and Wednesdays,	11	"

Dr. Marsh, every day, 3 o'clock. *Dispensary.*

Prof. Freer, Mondays and Thursdays, 10 o'clock.

Prof. Gunn, Surgical Clinic, every Saturday at 2 o'clock.

Our Paris Article.

Owing to the non-arrival from Paris of the remaining pages of the article being translated for the JOURNAL by Dr. Hay, we are reluctantly compelled to send our forms to press without waiting any longer for them. The remainder of the article will appear as soon as received.

Our Philadelphia Letter.

Our Philadelphia letter, in the last number, by some unaccountable mistake, was not placed under its appropriate heading. Readers, however, will readily recognize the initials "E. R. H.," and thus give the proper location of the "Clinical Cases."

Nasal Douche.

A very convenient little apparatus is the *Nasal Douche*—see advertising pages. Easily managed, and not liable to get out of repair, we have found by experience that it affords a very successful means of treating various affections of the

nose. The attention of those of our readers who have not tried it, is especially directed to the article.

Back Numbers.

Back numbers for 1867 can now be supplied to those of our subscribers who wish to complete their volumes.

To our Subscribers.

Subscribers who have not received their copy of the "Endoscope," as per our prospectus of last December, by notifying us will have it promptly forwarded. We shall take it as an especial favor to be notified of any failure to receive the JOURNAL on time, as our arrangements contemplate no delay in issue or failure in mailing the numbers.

LOOT.

Narceine.

Narceine is coming into great fashion among the French, to replace *Morphia*. The dose generally given internally is from a sixth to half a grain. At the outset it diminishes the pulse, but subsequently accelerates the pulsations. It does not seem to produce constipation, but rather a free action of the bowels. It is said to retard menstruation. Dr. Eulenberg prefers it to any other narcotic, and gives it in neuralgia, in painful affections generally, and in articular diseases, iritis, cystitis, and orchitis, stating that it produces sleep, "which is soft, tranquil, uninterrupted, and followed by a quiet awakening." *Narceine* is reported to be preferable to *Morphia*, as a general rule, and to act effectually in those cases in which *Morphia* fails.—*St. Louis Medical Rep.*

Arsenic in the Treatment of Pulmonary Phthisis.

Dr. Moutard Martin, physician to the Hospital Beaujon, presented a paper to the Paris Academy of Medicine, upon the value of *Arsenic* in the treatment of pulmonary phthisis. The following conclusions of his memoir, we take from the *Gazette Hebdomadaire*:

1. Arsenical medication has a very positive action upon pulmonary phthisis.
2. That action is more efficacious in slow phthisis than in phthisis accompanied by fever.
3. Rapid phthisis and acute granular phthisis are not modified by arsenic.
4. In a certain number of cases, even in advanced phthisis with hectic, the general state of the patients is favorably modified, at least for a time, which time may be quite prolonged.
5. The modification of the local lesions is very slowly produced.
6. A certain number of cures should be attributed to arsenical medication, which would be more numerous if the patients did not too soon believe themselves cured, and if they had more perseverance.
7. To be efficacious, the treatment should be long-continued.
8. The *Arsenic* should be administered in extremely small doses.
9. Daily doses should not exceed two centigrammes. (Dr. Moutard Martin used granules of *Arsenious acid*, one milligramme each. He commences by one or two milligrammes, and gradually augments the dose according to individual tolerance, milligramme by milligramme.) [Full and diminishing doses are better. — Ed. C. M. J.]
10. *Arsenic* is better borne by patients slightly advanced, than by those who have reached the stage of excavation.
11. When doses do not exceed 15 milligrammes or 2 centigrammes, tolerance is, so to speak, indefinite.
12. The most manifest action of arsenical medication is corrobant, and secondarily, modifying of the pulmonary lesion. Yet, certain facts prove that *Arsenic* exerts a direct action upon the respiratory function; it may have an action upon the pulmonary tissue itself, and upon tubercle.

Intestinal Puncture in Tympanites.

Under the advice of Dr. Foussagrives, intestinal puncture, as a last resource, has been several times practiced at Toulouse, on two patients suffering with tympanites. In the first case, the abdomen formed an immense mass; the patient was perfectly cyanosed and suffocating. On July 15th, M. Lafargue inserted an exploring trocar into the most distended part of the lower umbilical region. The gas escaped so violently

as to extinguish a candle. The danger of asphyxia was thus removed; but the distension reappeared the next day, notwithstanding the use of ice and compression. Two fresh punctures were made in different places, and gave so much relief that the life of the poor patient was prolonged until July 20th, when he succumbed to his disorder without suffering from the other complication. The success and the harmlessness of the operation are still more evidenced in a second case, in which, notwithstanding all the means employed, Dr. Ressequet found the patient half asphyxiated. He made a puncture without any ulterior trouble, and five others were afterwards successively made, until the gases were naturally evacuated, and the patient cured. These cases give solid reasons for the practice of this method, so apparently dangerous, but so really harmless.—*L'Union Medicale.*

The Preparation of Pepsin.

The following method of preparing *Pepsin*, was published by Dr. Beale, in his *Archives of Medicine:* "The mucous membrane of a perfectly fresh pig's stomach is carefully dissected from the muscular coat, and placed on a flat board. It is then cleaned with a sponge and a little water, and much of the mucus, remains of food, etc., carefully removed. With a back of a knife, or with an ivory paper knife, the surface is scraped very hard, in order to press the glands and squeeze out their contents. The viscid mucus thus obtained contains the pure gastric juice, with much epithelium from the glands and surface of the mucous membrane. It is spread out upon a piece of glass, so as to form a very thin layer, which is dried at a temperature of 100 degrees over hot water, or *in vacuo* over sulphuric acid. When dry, it is scraped from the glass, powdered, and kept in a stoppered bottle. A good digestive fluid may be made as follows: of the powder, 5 grains; strong *Hydrochloric acid*, 18 drops; water, 6 ounces. The fluid may be filtered easily, and forms a perfectly clear solution, very convenient for experiment. It may be taken with the salt, at a meal. The powder is devoid of smell, and has only a slightly salt taste. This powder undergoes no change, if kept perfectly dry. It contains the active principle of the gastric juice almost unaltered. Eight-tenths of a grain of this pepsin, with ten drops of dilute *Hydrochloric acid* and an ounce of distilled water, dissolve one hundred grains of hard-boiled white of egg in from twelve to twenty-four hours."

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—APRIL 1, 1868.—*No.* 7.

THE RECOGNITION OF AMERICAN SURGERY ABROAD.

With a Brief Consideration of the Indications for Treatment in Certain Deformities, and a Description of Orthopædic Apparatus Exhibited at the Paris Exposition.

BY F. O. EARLE, M.D., CHICAGO, ILL.

THE decided preference given to American improvements in surgery at the late Paris Exposition, is a most gratifying proof of the progress of medical science in this country.

This official recognition of the superior excellence of these productions of American genius over corresponding European contributions, though obtained by individuals, must, nevertheless, be looked upon as an honor to the medical profession in America, as a whole, and is an event which should awaken a feeling of pride in the heart of every member of it; for we have long been accustomed to look abroad for all scientific excellence, and especially in all things pertaining to medicine and surgery; and this triumph of American over European ideas is the more satisfactory when we remember that it was gained on European ground, and that the judges in this great international contest were Europeans.

In the important departments of the healing art, more especially, were American physicians the successful competitors; viz., in military surgery, and in orthopædic surgery.

The American Sanitary collection of Dr. Evans, comprising every thing which can contribute to the physical welfare of the soldier, whether in camp or on the march, on the field or in the hospital, elicited unqualified admiration and praise; and all these improvements have been unanimously adopted by the European powers.

Space will hardly permit here an examination of the articles included in this collection; but the "Howard Ambulance" was, on account of its very superior merits, looked upon with special favor, and having been awarded a silver medal, deserves particular mention. The whole collection received the highest prize of a gold medal.

In a communication which appeared in a late number of the JOURNAL, (Oct., 1867,) I observed that the most useful discoveries and important practical suggestions regarding the management of deformities, had been made by American physicians. The names of Drs. H. G. Davis, L. A. Sayre, and C. F. Taylor, all of New York, are as "familiar as household words" in the history of the progress of this important department of surgery in this country, and each of them have furnished valuable additions to its literature.

By referring to the official report of the Imperial Commission, appointed to examine surgical instruments and apparatus, a partial translation of which is given below, it will be seen that to Dr. Taylor is given the honor of having exhibited the *only* improvements in apparatus for the treatment of deformities.

The report reads as follows:

"In orthopædy (that branch of surgery relating to the treatment of deformities), there is nothing new in the Exposition, except the collection of apparatus of Dr. C. F. Taylor, of New York. Of these apparatuses, some are intended to correct vertebral deviations consequent upon Pott's disease, or angular curvature of the spine, and others for lateral curv-

ature; others, too, are for the cure of muscular paralysis of childhood, by means of localized movements. Dr. Taylor has on exhibition models of extremely ingenious apparatus, which promote the development of certain muscles or groups of muscles by means of local exercise.

"The spinal apparatus of Dr. Taylor is remarkable, and differs entirely from analogous apparatus in the Exposition."

At a meeting of the Academy of Medicine, of Paris, held subsequent to the close of the Exposition, the attention of its members, was called to the appliances by M. Bouvier, "one of the most competent French surgeons," whose observations on their merits and the advantages to be derived by the patient from their employment, were embodied in the report of the commission.

Having employed most of the apparatuses in my own practice, I can speak in the highest terms of their genuine practical utility; and presuming that a description of some of them may not prove uninteresting to the readers of the JOURNAL, the limits of a single article not sufficing for a representation of the whole, I have selected those for spinal curvatures and morbus coxarius, as possessing unusual interest for the general practitioner, whose attention is not unfrequently called to those maladies of most common occurrence in the practice of the orthopædic surgeon.

Before describing the several instruments, it will be necessary to consider, very briefly, the pathology of the diseases to which they are applicable, and the indications for their employment.

In this disease, "Pathological Anatomy shows us an intervertebral cartilage in a condition of congestion or softening, yielding to the pressure from above; the body of an inflamed or ulcerated vertebra crumbling anteriorly under the superimposed weight of the head, trunk, and upper extremities, and thus producing a posterior projection of the spinal column."*

The indications in this disease, I conceive to be:

* Contributions to the Pathology, Diagnosis and Treatment of Angular Curvature of the Spine. By BENJ. LEE, M.D. Philadelphia, 1867. P. 62.

To afford to the vertebral column effectual relief from pressure at the diseased point.

To secure the bodies of the affected vertebra against the irritation arising from motion and concussion, while the patient maintains the erect attitude.

To assist the vertebral column to regain the true spinal tone; and

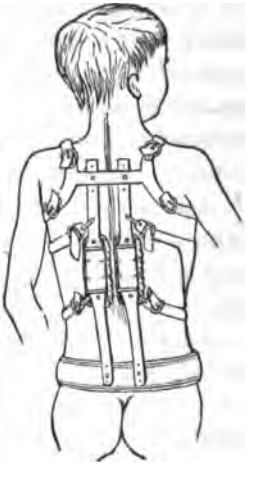
To rectify all constitutional disturbances.

As these constitutional disturbances are, in a very large majority of cases, directly dependent upon the diseased condition of the spine, and the deformity consequent thereupon, it is natural to infer that they will be relieved if the indications previously mentioned are fully answered; and experience proves this inference to be correct.

It becomes, important, then, to inquire how these indications may be most satisfactorily fulfilled.

Fig. 1.

Fig. 2.



Figs. 1 and 2 represent a front and back view of an apparatus for the treatment of angular curvature of the spine.

In my own practice, I have never found any means so effectual as the apparatus shown in the above cut, which consists

of a broad, well-padded band, which embraces the trunk low down. From this hip-band, two steel uprights pass up the back on either side the spine, and these are attached at the top to a double-T-shaped crosspiece. Opposite the point of disease are two broad plates, which are attached to the uprights by stop-hinges; and outside of these, above and below, are little screws, which pass through the upright and rest upon the pad-plate.

A pair of shoulder-straps, made of firm soft webbing, and padded; a broad apron, nearly covering the anterior portion of the trunk; and a pair of pads, which are fastened to the instrument opposite the seat of disease — the point of which a fulcrum is made — complete the apparatus.

The ends of the cross-piece at the top, to which the shoulder-straps are fastened, are spread far apart, the upper one resting just below the slope of the shoulder, and the lower reaching a point on a level with the axilla.

The object of this arrangement is that the straps may pass directly forward and around the arms, thus preventing the loss of any force by diagonal action, and also entirely obviating any painful and injurious ligaturing of the arms.

The chief peculiarity of this instrument is the arrangement of hinges by which the pad-plates are attached to the uprights, and the little screws passing through the latter above and below the hinges, and working against the pad-plate.

By turning in the screws, the hinges are opened, and the amount of sustaining force increased to any desirable extent.

The hinges, by their position, absolutely prevent motion forward, but are "free to bend backward," thereby making special provision for the exercise and development of the spinal muscles. These organs are thus made accessory to the apparatus in straightening the curved spine; for the "spinal muscles, by alternate action and rest, actually alternate with the instrument in sustaining the weight of the body and overcoming the curvature." *

* The Mechanical Treatment of Angular Curvatures. By Charles Fayette Taylor, M.D. New York, 1864. P. 26.

It will be seen that the action of this apparatus is directly backward at the hips and shoulders, and directly forward at the point of disease; and that, therefore, no force is lost, but it is all exerted in a direction tending to straighten the spine.

The limits of this article will not allow — even were science to be promoted thereby — a full consideration of the theories, more or less plausible, which have been advanced, from time to time, regarding the pathology of lateral curvature of the spine.* Incipient cases, which alone could disclose the true pathological condition of the textures involved, can very rarely be obtained for examination; and advanced cases, when opportunity is afforded for examining them, reveal results merely, without yielding any evidence respecting causes.

When the truth is thus involved in obscurity, we can only rely upon such facts and deductions as may be established by extended and multiplied observation; and these seem to indicate that in these cases the spinal column is mechanically, not pathologically, affected — that none of the tissues of the spine itself are actually diseased.

The vertebral column is exceedingly flexible; and its muscles failing, by reason of undue weakness, to give it adequate support, it consequently bends; and this tendency to deviation is constantly increased by the superincumbent weight, which, if continued long enough, produces permanent deviation of the column.

The apparent cause, then, of this distortion is weakness of the spinal muscles. But the organs can hardly be considered in a pathological condition merely because they are suffering from a certain degree of debility. There must be some reason for this weakened condition of the muscles, and this will also be found to be the *real* cause of the deformity.

Dr. Taylor, in a paper read before the New York County Medical Society, at its stated meeting, May 7th, 1866, and entitled "The Initial Cause of Lateral Curvature of the

* Reference is not made here to those cases of lateral curvature—comparatively few in number—caused by rachitis, paralysis, reflex spasmodic contraction of the muscles, and unequal length or distortions of the lower extremities.

Spine," observes: "This form of curvature we are now considering, often occurs where there is every evidence of active nutrition and growth." *

We have seen that none of the tissues involved in the organization of the spine itself are diseased; neither does it appear that the muscles whose duty it is to support the spine in its erect position, have suffered any pathological change.

Where, then, shall we look for the cause of this deformity?

In reference to this, the writer above quoted says: "To one source only, then, can be traced the initial cause of lateral curvature — the nervous system. The muscles fail to give support to the column, from deficient innervation." †

This conclusion is amply supported by the facts connected with these cases: to wit, the age at which the curvature generally begins; the immense expenditure of nervous force to which the patient is subjected at this period of most rapid growth and development, when all the energies of the system are required to fit her for the duties and functions of womanhood, but which are too lavishly expended in the cultivation of the mind, and the attainment of the polite accomplishments, thus entirely subordinating the physical to the mental organization, and straining the brain and nervous system to their utmost tension, at a time when the patient has little nervous force to spare.

This view finds additional support in the happy results of treatment in many incipient cases, in which the directions have been simply to remove the patient from school, have her lie down much of the time, carefully avoid all mental labor and excitement, and, in fine, do nothing but grow.

If the foregoing deductions are true, the indications are plain. They are:—

To protect the patient from waste of nervous force.

To overcome the manifest debility of the spinal muscles.

To relieve the lateral portions of the spinal column from pressure.

* N. Y. Med. Record, Vol. 1, No. 7, p. 165. † *Ibid.*

We find our means of fulfilling these indications in entire rest from mental activity, in "localized movements," in mechanical appliances.

The first of these measures must be absolutely insisted upon in all cases. There must be an entire interruption to mental labor, and excitement of all kinds must be avoided.

"Localized movements" can not well be dispensed with in the treatment of this form of curvature, their use being twofold: to strengthen the muscles, and to relieve the deformity.

In incipient cases, the means above indicated will generally be found sufficient for the cure; but in cases more advanced, mechanical support is often necessary.

Fig. 3.

An instrument to be efficient in reducing lateral curvature, must be constructed with the view of exerting lateral pressure,

and, when necessary, counter-pressure; care being taken that we do not prevent or hinder necessary muscular exercise, and thereby hasten the progress of the deformity which we are endeavoring to relieve, by increasing the muscular weakness upon which the deformity in so great a degree depends.

In Fig. 3 is shown an apparatus which possesses the above-mentioned qualities in an eminent degree.

It consists of a hip-band, *a*, extending three-fourths the distance around the hips, the ends being attached by a padded leather strap. Attached to the hip-band is an upright, *b*, which is curved so as to pass upward and backward out of the way, and ends in a broad plate, *c*, which is made to fit the side of the trunk, and also to exert some pressure upon the prominent shoulder-blade. If there should be a second curve to the left, in the lumbar region, the plate, *d*, may be used to embrace the floating ribs on that side. The most important part of the instrument remains yet to be mentioned. This is the perineal band, *e*. It will be seen that by means of this strap, the amount of lateral force brought to bear upon the convexity of the curve is increased or diminished. *f* is a strap made to pass over the right ilium, and is found useful in maintaining the hip-band in its place.

It is apparent that this apparatus does not interfere with any bodily motion, or, at least, only with such as it is absolutely necessary to antagonize in order that the deformity may be overcome, while the arms are entirely free.

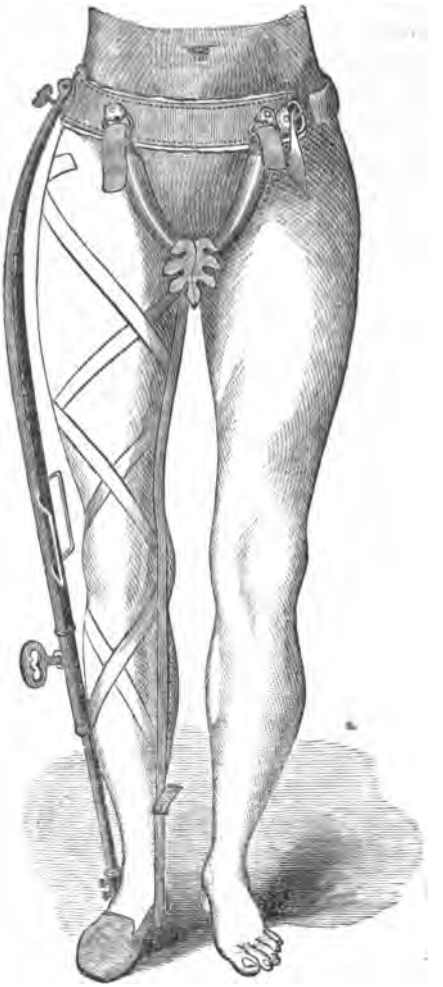
Fig. 4 exhibits an apparatus for producing counter-extension in hip-joint disease — admitting also of locomotion, and rotation of the limb, without interfering with the efficient action of the instrument. (See p. 228.)

With Dr. H. G. Davis, of New York, originated the idea of *counter-extension with locomotion* in this disease.

In several important particulars, however, the instrument proposed and used by him in healing this malady was far from perfect. The thigh was ligatured by the perineal band, both ends of which were attached to the same point on the shaft of the instrument; and he also employed "elastic extension."

Dr. Taylor observed these faults, and proposed to remedy them by means of a cross-piece and joint at the pelvic end of the apparatus, and by using unyielding force in place of elastic extension.

Fig. 4.



This was a great advance towards perfection, but there was still wanting one element to make the instrument complete.

The sole object of counter-extension is to destroy the tonicity of the flexors, abductors and adductors of the thigh, and thus relieve the pressure upon the surface of the joint.

If this object be perfectly accomplished, the joint will be preserved from shock and pressure, and the patient can have the advantage of fresh air and exercise, as under these circumstances locomotion is not only free from danger, but is eminently advantageous.

Dr. Taylor's first modification of Davis' splint, though a great improvement upon the latter, was still imperfect in this respect: that the adductors, the muscles most influenced by contractions, were not perfectly antagonized; and on account of this inability of the instrument to extend these muscles to a sufficient degree to overcome this tonicity, apparent shortening of the limb would necessarily occur.

This object (perfect antagonism of adductors), so desirable, and, in fact, absolutely essential to a complete recovery in these cases, is fully accomplished by the apparatus shown in the cut.

Here, it will be seen, the cross-piece at the pelvic end of the instrument is converted into a hip-band, which embraces the hips for about three-fourths of their circumference, and is terminated by a leather strap, covered with a removable pad to guard against pressure and abrasion. Attached to the hip-band, in such a manner as to admit of flexion and abduction, is the shaft, which passes down the outer side of the leg, and at the external malleolus is inserted into the foot-piece, which will be described more particularly hereafter.

It will be noticed that in this appliance, two perineal bands are used. The advantage of this arrangement is two-fold. 1st, By tightening the opposite strap, the thigh is very strongly abducted, and thus we act directly on the adductor muscles. 2nd, The danger of abrasion of the skin in the perineum is diminished in a great degree; and if it should become sore, one strap can be loosened, or removed altogether, if necessary, and the action of the instrument kept up temporarily by the other. Abduction will always be rendered more certain, by

having a small thumb-screw passing through the upper end of the shaft, and working upon a steel plate on the hip-band. On the shaft of the splint, opposite the knee, is a bent wire, which serves as a point of attachment for a knee-cap, or pad, not represented in the engraving.

The lower end of the shaft is received in the foot-piece, and is held in place by the screws, the upper one clamping a shallow depression roughened at the bottom, and the lower fitting loosely in a deep groove in the end of the shaft. The foot-piece is riveted to the sole of the shoe, and contains two slits, one on each side of the foot, through which passes a piece of webbing, by which the outside adhesive strap is terminated, and which is fastened to the inner strap, terminating in a buckle.

As the action of the instrument must be exerted unremittingly, it is necessary to have two foot-pieces exactly alike, one attached to the shoe for day use, and the other to a slipper to be worn at night.

Extension is made by means of the key which fits a ratchet on the shaft, and after being extended to such a degree as is required to make the patient comfortable, it is fastened by the slide.

After the adhesive straps are applied, as represented in the figure, the limb is bandaged from the ankle to the hip.

In presenting these appliances to the notice of the profession, it has not been my intention to convey the idea that they will, in the exact form here represented, answer for all cases.

Our remedies must always be the embodiment of our ideas of the special requirements of the particular case which is before us. Routinism in the practice of any department of medicine, can not be too severely reprehended.

All the instruments which have been described are capable of unlimited modification, and they must be used discreetly, intelligently, and, above all, *efficiently*, if we expect to gain the best results.

SELECTION FROM SURGICAL NOTES.

BY PROF. GUNN.

Case of Excision of Testis, Resection of Humeral Head, and Extirpation of Clavicle.—In the autumn of 1852, I was consulted by X. Y. Z., on account of an enlargement of one of his testicles, which he attributed to a syphilitic taint acquired the year previous, while sojourning in Paris. The organ was enlarged to twice its natural size, and was rather firmer in texture than its fellow, painless, without preternatural sensitiveness, and inconvenient only from its increased weight. It had undergone the usual treatment by strapping, while mercurials had been duly administered. I put the patient upon the liberal use of *Iodine*, both topical and constitutional. I saw the patient only occasionally during the next eighteen months, during which time the treatment had been but imperfectly carried out; the disease had slowly but steadily increased; his general health had suffered seriously; and my own fears were that the disease was of malignant character. I recommended the removal of the organ; and after making the operation, I put the patient once more upon *Iodine*, on the original idea of the disease — though my fears pointed to a more serious view of the case. Under this treatment, he rapidly regained his health, which he retained until during the winter of 1856, when prolonged exposure to a fierce prairie wind was the exciting cause of violent inflammation and subsequent caries of the left humeral head.

He did not come again under my care until the autumn of 1857, when I resected the diseased portion of the humerus, disarticulating the head of the bone. After the operation, I again put him upon *Iodine*. The wound healed kindly, and his health, which, previous to the operation, had suffered severely, was again rapidly regained.

The patient was cautioned against such exposure as had

operated to produce the last development, and instructed as to prompt treatment in case of any manifestation of the disease. Notwithstanding these instructions, he again, in the winter of 1858–9, exposed himself to a fierce and prolonged wind, became thoroughly chilled, and caries of the external extremity of the left clavicle was the result. In October following, I resected the diseased end; but the disease progressed, and in March, 1860, I extirpated the whole bone. In making the operation, I was able to save most of the periosteum, which has reproduced a somewhat irregular, though firm and serviceable bone. After the operation, *Iodine* was again used; and the patient, as on previous occasions, completely regained his flesh, strength and color. During the last attack, he was greatly reduced, and *Iodide of iron* was freely used. Since then, the occasional use of Blanchard's pill of *Iodide of iron* has been necessary — the patient recognizing the indications, and resorting to its use without advice. Under this treatment, he has been enabled to preserve an even, robust condition. The extremity which has lost the humeral head and the whole clavicle, is a very serviceable member. In fact, it is but seldom that the loss would be indicated by the imperfection of his movements.

Spongiose. — The introduction of prepared sponge into common use, in the construction of mattrasses, cushions, etc., it is to be hoped will go far toward counteracting the deplorable effects of certain practices, which, according to Prof. H. R. Storer, threatens the future magnitude of the census. Athenæus says it was the ancient practice to put sponges into beds, as incentives to venery. Paulus Ægineta mentions it among the list of aphrodisiacs. The vulgar saying, "Poor men for children," has in it the germ of a profound physiological truth. Infertility is one of the penalties of luxurious living, and absence of children among the wealthy and fashionable, is by no means an evidence of criminal methods of prevention.

PHILADELPHIA CORRESPONDENCE.

PHILADELPHIA, PENN., *March 2nd*, 1868.

Chicago Medical Journal:

W. M., age 42 years, blacksmith, presented himself with a large tumor at the bend of the right elbow, measuring about — inches in length and the same in breadth, complaining of a dull heavy pain and numbness in the limb. This tumor was of nearly one year's growth. Ten days before its first appearance, he was kicked by a mule. The tumor was elastic, and harder at some points than at others. Preternatural redness and heat. There was a pulsation, which was referable to the displaced brachial artery. Patient was etherized, and an incision made, which revealed the hematoid variety of encephaloid tumor. The arm was amputated at shoulder joint. In four weeks, the patient was discharged, cured.

To-day closes the college for one month; and during the session just ended, we have had a large number of interesting cases for operation and treatment. I propose in this letter to give you a brief *resumè* of the surgical clinic, as it, like all others, presents valuable and interesting data. There have applied for surgical aid, *six hundred and forty-one persons*. Among this large number, let me enumerate the following: Amputations, five, consisting of one at the shoulder joint, for an encephaloid tumor, involving the elbow joint, one just above the knee, for inflammation of that joint, two of the index and one of the ring fingers; eight abscesses, acute and chronic, in various regions of the body; two cases of permanent anchylosis of the knee, and one of forefinger; two cases of cystitis; one of organic stricture of the urethra; two cases of hydrocele; two of varicocele; five cases of Potts' disease of the spine; atrophy of arm, from wound in hand; atrophy of leg, from wound of ankle; two cases of Barton's fracture; one fractured fibula; in another case, the fibula was

intentionally broken, and the tendo-Achilles cut, to correct the deformity resulting from injury to ankle; intentional fracture was made of the olecranon, to place the forearm at right angles with the arm, in case of dislocation of three months' duration; dislocation of head of humerus into axilla; dislocation of head of radius; one case of perineal section, for rupture of neck of bladder; four cases of lithotomy, one on a boy four years of age, and one upon a man sixty-seven years old; two cases of necrosis of humerus, and one of necrosed tibia; a number of cases of syphilis, of all descriptions; one case of fissure of hard palate; four cases of fissured upper lip; neuralgia of inferior dental nerve, cured by trephining inferior maxillary bone, and removing 1¼ inches of the nerve. There have been seven cases of club foot, representing the varieties of talipes varus, talipes vulgus, and talipes equinus; one case of phymosis; one of anal fistule; one of ligature of femoral artery, for the radical cure of popliteal aneurism; two cases of sciatica; three of coxalgia, chronic ulceration of leg, treated by scarification; six cases of converging and diverging strabismus; two ulcerations of cornea; three of cataract; one of congenital blindness; one of deposit of lymph in anterior chamber of the eye; schirrus of mammary gland; cystic ditto; encephaloid ditto. Five fatty tumors were removed, from the size of fist to one ten pounds in weight; one immense fibroid tumor, from sacrum; one keloid, at base of ear; five encephaloid tumors; three parotid ditto; three cystic ditto; one reducible scrotal hernia. In addition to these, there have been many others of more or less importance. In all these cases, but two deaths have resulted; one from the operation of lithotomy, and the other in the case of perineal secture. Both are interesting cases, and in my next I shall give you a full account of them, with the autopsy of each.

Yours, E. K. Hutchins.

CINCINNATI CORRESPONDENCE.

CINCINNATI, *March 5th*, 1868.

Chicago Medical Journal:

The dearth pertaining to matters of medical interest here has been somewhat relieved by the annual commencements of our medical schools. Again has Young Physic gone forth in his might of sheep-skin, text-book, and, perchance, amputating case, to recruit the medical army.

Y. P., like the ardent young soldier, will be sent to the *front*, to skirmish or do picket duty. May they imitate those progenitors who have never gone backward, but have ever stood to their colors!

The Cincinnati College of Medicine and Surgery — justly termed the "Mother of Professors" — had a graduating class of eleven. The valedictory was delivered by Prof. Vaughan, of the chair of chemistry.

To the Faculty of this school has been added, during the past season, the names of Professors Carroll and Young. The former comes forward as a teacher of Diseases of Women and Children, after half a century's experience as an intelligent and industrious practitioner. The latter, as Professor of Surgery, is entering a useful future. Educated in Medicine at Albany, under Dr. Swinburn, and during the whole period of the late war, as surgeon, a more than ordinary observer, he possesses more than usual ability.

On the 22nd of February, the Miami Medical College graduated thirty. Prof. Chapman delivered the customary address. During the evening, the graduated class and numerous professional friends were handsomely entertained by Prof. Mendenhall.

The exercise of the Ohio Medical College took place on the evening of March 2nd. Prof. P. S. Connor addressed the class, and was listened to with much interest. There were fifty-four graduates. A parting banquet was given by the

Faculty, at the St. Nicholas. The occasion was made particularly interesting by the presence of many of the friends of the school.

Last night, the Ohio Dental College graduated nine students.

The appearance of better times will doubtless add to the number of those who seek this point for medical education. The new hospital, which is being constructed on the Pavillion place, by the city, will be completed the coming summer; and as it will be of a first-class character, it will add to the attractiveness of our city.

There has been but little sickness here since the cholera disappeared (1866). Last fall and early winter, typhoid fever prevailed, principally among children and youths. This winter we have had an epidemic of measles, mild in character. Perhaps it would be well to include the *fashionable complaints* of typhoid fever and diphtheria, whose clinical history differs materially from those diseases enumerated in the nosology of authors, under the same name.

The two complaints above referred to, have become endemic here, and are never fatal; in fact, many persons suffer from repeated attacks of both, during the season. ***

TWO CLINICAL CASES.

BY TOM O. EDWARDS, M.D., LANCASTER, OHIO.

Professor:

I was called two weeks since, by request of Dr. Dawson, physician in attendance, to see a Mrs. W., four miles from our city, aged 78 years. The Doctor could not visit her that day, and requested I should be sent for. I was prepared to see a case of stubbornness, and went armed. You know I have great faith in the therapeutic application or use of remedies.

The controlling indication, nausea and vomiting, had existed nearly a month, with slight remissions. The patient told me

for more than twenty years "she had had such spells; sometimes the doctor could, and sometimes he could not, help her. This was the longest and hardest; and, for the first time in her life, she believed she would now die." She was emaciated; had retained nothing on the stomach for two weeks, except one night mush and buttermilk, which was ejected unchanged in the morning.

I remained with her all the afternoon; used all the appliances of the art, through the stomach, hyperdomic, per enema; and finding all not available, induced anæsthesia, and directed its continuance. Met Dr. Lawson in the morning; then got such a history of suffering as I will not detail. During the night, three or four large discharges of an inodorous matter had passed the bowels, and the vessel emptied on the snow in the yard. We examined these, and found the "prune juice" so much talked of in scirrhous or cancerous stomach. Looking over the snow, we saw some fifty places on which the contents of the basins had been poured after vomiting, and all had the green color of bile; and the Doctor told me she never had vomited unless there was more or less of this green matter with the ejections, and in his life he never saw a case characterized by this billiousness. He had gone the round, and found, if any thing had ever acted medicinally (and this he doubted), it was *Sub. nit. of bismuthum.* The case had given him much trouble, for more than five years. He had had various and conflicting opinions, at different times, of its pathology; but at no time, such as were entirely satisfactory. He is not easily conquered; but in this case, confessed there was something neither his books nor his observation satisfied him of its cause or origin.

I stated three or four large dejections occurred the night before, accompanied with large flatulent discharges. These produced subsidence of the abdominal walls; and then, for the first time, we found a tumor — that over or near the cardiac orifice; and then schirrus of cardiac orifice was diagnosed. This, you know, is rare in such affections of stomach; the tumor, in ninety per cent, is found in pyloric orifice.

That afternoon, our patient died — calmly, and with no more suffering than had existed for four or five weeks.

Two days after, we were allowed to "examine only the stomach." You know the prejudice, and as we asked only to open the stomach, after a long time we got the consent of friends, and particularly as the patient had requested it, the objections were removed.

On going to the house with Dr. Geo. W. Brewster, I predicted we should find gall stones in the gall bladder; and truly it was so. The tumor we felt was the contents of the gall bladder, which, on being opened, I counted, and put in Dr. Dawson's hands. One hundred and nine gall stones were taken from the gall bladder, and after the removal of the corpse, one more was found on the floor, making one hundred and ten. Again, no man could have placed them again in the bladder. They were of all imaginable shapes, from the size of a grain of corn to ten times that size; filling, dovetailing, every space in the bladder; and one, the largest, in the duct, closing it so entirely as that it could neither be pressed forward nor backward. The duct, from the conjunction of the hepatic (?) duct with the duct from the bladder, and they forming the *ductus communis choledochus*, was open; and thus the bile, secreted as excreted, ran into the natural opening of the intestine. The stones were pearly white, soft, friable, and greasy to the feel. This number was remarkable, and the curving of their formation and deposition, more remarkable. I have a number, and will send them if you desire. Had I all of them, I would forward for your cabinet, as a curiosity. *There was also schirrus in pyloric orifice.*

After a correspondence with several prominent men in the profession, I deem it my duty to report the following case. In my own practice it was new, and I could find nothing in the various books similar to it; but still I feared it might be one of "Charley's discoveries," known to every body else. I thus communicated with distinguished professors; it was new to them.

I was called, on the morning of Dec. 7th, to see a Mrs. B., in our city. I was told by her husband that Dr. Boerstler had been with her all night; and, being very feeble and unwell, sought my assistance. She was the mother of six children; had some trouble in previous labors, but never such as then existed. Dr. B. stated he was called the evening previously; touched, but could not satisfactorily make out the presentation; and, as the pains were slow, went to bed, desiring to be called when wanted. Was called at 2 A. M., and found the labor active, but no progress; one hand presenting, and nothing more. He, finding the hand very diminutive, indicating a premature birth, pulled — as he thought, very gently — and found the arm separated from the shoulder; and looking into the vessel, under the bed, I saw the arm of an immature child. The doctor was lying upon a couch, and, as the room was very cold, was covered with blankets. He requested me to make an examination, and to take charge of the case, as he was exhausted and ill. On introducing my hand, I found the os dilated; I passed my entire hand *to the middle of the uterus*, and found a second arm presenting, so firmly girt about by an hour-glass contraction of the uterus as to preclude the passage of a finger. The slightest traction on the hand, released it from the shoulder; and the space occupied by the arm was closed, as with a drawn string, and resisted dilatation. The patient was excited, cold, and restless; demanding immediate means of relief from what she described as a pain such as a hot iron would be supposed to give at the seat of contraction. She had taken some brandy. Circulation feeble, and her importunities great for relief from this pain. I gave her a prompt anodyne of fluid extract *Tr. opii, deodorata*; sent for four ounces of fluid extract *Belladonna;* injected over the uterus, hypodermically, a portion of the extract, and applied a cloth, wet with the extract, over the entire abdomen; pinned up and covered the patient with blankets, got the room warm, and awaited results. Our patient slept soundly, three hours; awakened refreshed, and commenced her importunity for relief. She was fully advised of the trouble, and as her stom-

ach was becoming irritable, it was decided to use additional *Tr. opii*, per enema; and as we were preparing the instrument, a violent pain came on, and on touching, *the child's breech presented;* three pains completed the delivery of child and secundines; the uterus contracted, and "she was as safe as if she was in church,"' and had an unusually good "getting up."

This was evidently a case of hour-glass contraction in labor, preventing the expulsion of the child; and as such, was unique. So say my corrrespondents; but all have had occasional cases of such contraction, following labor, and retaining placenta; — none such as this.

The statement of our patient, an unusually intelligent and observing lady, was, that she did not come to the full period of gestation; and that for four or five months she felt as if there was a contraction or hardening of the uterus — *a burning, severe, constant pain*, which no position would benefit, nor any anodynes entirely dispel; and she was prepared for some abnormal result in her labor; and, placing her fingers on the abdomen, clearly pointed out the place of the contraction as the seat of her constant pain.

Dr. Boustler has practiced more than half a century, has a large obstetric practice, and never saw such a case; and in my own practice of rising thirty years, it never before occurred; and I give it as a rare case, and also to show the advantage of patience and trusting to nature, as a general rule.

I used the *Belladonna* analogically: if it will dilate the os, why not dilate a spasm of circular fibres?

BOOK NOTICES.

TREATISE ON THE DISEASES OF THE EYE, Including the Anatomy of the Organ. By Carl Stellwag von Carion, M.D., Professor of Ophthalmology in the Imperial Royal University of Vienna. Translated from the 3rd German edition,

by E. C. Hackley, M.D., Surgeon to the New York Eye Infirmary, etc.; and by D. B. St. John Roosa, M.D., Clinical Professor of Diseases of the Eye and Ear in Medical Department of the University of the City of New York, etc. New York: William Wood & Co., 61 Water street. 1868. Pp. 774. For sale by Keen & Co., Lake street, Chicago.

The fact that the three editions of Prof. Stellwag's work in the original have been received with so much praise by ophthalmologists not only in Germany but also in other European countries, together with the fact that for so many years there has been no comprehensive work in English on diseases of the eye, must recommend this translation most emphatically to the profession, wherever our language is spoken.

The general plan of the work, and the manner in which each subject has been discussed, present as little ground for criticism as we could expect in a similar work of any living author.

The reader will find a sufficiently extended statement of all the facts contained in our older authorities, together with the important results given us by so many distinguished observers, who have, more recently, devoted their life labor to the advance of ophthalmic science.

We find each tissue of the eye and its appendages, made the subject of a separate chapter. The minute anatomy, physiology and abnormal changes of each tissue are carefully described, and illustrated, in due order, by numerous cuts. Each disease, its course, results, and treatment, are then fully described.

We can give our readers, perhaps, no better conception of the whole work, than by presenting an abstract of the first section — that devoted to the cornea and its diseases. We first find a description of the anatomy, physiology, senile changes and nosology of the cornea. Then follows a description of the symptoms, causes, course, result and treatment of the several forms of inflammation of the cornea. Pannus,

opacities, and staphyloma, as the effects of keratitis, is made each the subject of a sub-section.

There are separate sections, each similar in its general arrangement to the first, devoted to the iris, choroid (glaucoma, sympathetic ophthalmitis), vitreous humor, lens, retina, optic nerve, sclerotic, conjunctiva, lids, lachrymal apparatus, orbit, tumors, artificial eyes, enucleation of the globe, muscles, refraction and "accommodation for vision at different distances," with their anomalies, and the functional (amaurotic) diseases of the optic nerve.

There is an introductory chapter on the treatment of diseases of the eye. Each section closes with a list of authorities upon the subjects under discussion.

In an appendix, we find a short chapter on the ophthalmoscope and its uses, and a series of Jaeger's test types. There is a copious alphabetical index of the whole work.

The classification of diseases is exceedingly simple, and based upon the characteristic appearances shown by direct inspection, or revealed by the ophthalmoscope or *post mortem* (enucleation) examinations. The terminology is also simple; the whole work, from beginning to end, is as free from long Greek compound words, so profusely used by some of the older German ophthalmologists, as such a work at the present time well can be.

A very important feature in the work, is the practical manner in which nearly every subject is treated. There is scarcely any discussion of theories. The author confines himself almost absolutely to the detail of the important and demonstrated facts regarding the anatomy, physiology, pathology and treatment of disease.

The profession is certainly much indebted to Drs. Hackley and Roosa, for this excellent translation of a most valuable work.

The publishers deserve great credit for the perfection of the mechanical execution. The numerous wood engravings and chromo-lithographs add much to the usefulness of the work.

E. L. H.

A Practical Treatise on the Diseases of Women. By T. Gaillard Thomas, M.D., Professor of Obstetrics and Diseases of Women and Children in the College of Physicians and Surgeons, New York; Physician to Bellevue Hospital, etc., etc. With two hundred and nineteen Illustrations. Philadelphia: Henry C. Lea. 1868. Pp. 625.

This book, published in the usual excellent style of the great Philadelphia house, is devoted exclusively to diseases of non-pregnant women — such affections as phlegmasia dolens, puerperal fever, mammitis, etc., not being discussed. The writer has for many years been in a position affording him peculiar advantages for observation; and very considerable experience as a teacher has acquainted him fully with the wants of young practitioners. The work is concise and practical, avoiding the discussion of unsettled questions, but giving a judicious *resumé* of known facts. Not the least interesting feature is its brief historical sketches, which give a bird's-eye view of the progress of the art, from early times.

Atlas of Venereal Diseases. By A. Cullerier, Surgeon to the Hôpital du Midi, Member of the Surgical Society of Paris, Chevalier of the Légion D'Honneur, etc. Translated from the French, with Notes and Additions, by Freeman J. Bumstead, M.D., Professor of Venereal Diseases in the College of Physicians and Surgeons, New York, etc. With about 150 beautifully colored figures, on 26 plates. Philadelphia: Henry C. Lea. 1868. Part I. To be completed in Five Parts. $3.00 each.

A magnificent work — imperial quarto, in the best style of artistic execution. It arrived too late for further notice in the present number.

EDITORIAL.

In the course of a few days, those of our subscribers who are in arrears for The Journal, will receive a notification of their indebtedness. They will confer a favor upon us, and save further annoyance, by remitting us promptly on receipt. It is much easier and pleasanter, to both publisher and subscriber, to conduct a publication upon a cash in advance basis, as it is far easier to pay upon the presentation of a bill than to suffer it to drag along. In the next number will be published a list of receipts for subscriptions since January.

Publisher.

Clinical Lectures on Diseases of the Eye.

Dr. E. L. Holmes will deliver two clinical lectures on diseases of the eye, each week during the spring, at the Chicago Charitable Eye and Ear Infirmary.

No more excellent opportunities in the North-west can be secured for the clinical study of the diagnosis and medical and surgical treatment of diseases of the eye, than at the Infirmary. During the past year, 656 patients were treated at this institution. During the entire winter course of lectures, there were in daily attendance at least 36, and for a period of two months, 48 patients.

Certificates of attendance will be given to physicians and students who attend the whole course.

Mislaid.

Some gentleman sent a letter, a few days since, with postal currency to balance, with back numbers of the Journal, for a copy of "*Medical Examinations for Life Insurance.*" The book was wrapped to send him, but in the interim, not

more than half an hour, our correspondent's letter, with his address, mysteriously disappeared. It is feared the colored gentleman who does the office fires, etc., is at the bottom of this, as of certain more public difficulties. Will our correspondent write again?

All mistakes at this office will be promptly and most cheerfully rectified.

☞ No more back numbers wanted.

Philadelphia School of Examinations.

We notice that our Philadelphia correspondent, Dr. Hutchins, in connection with Drs. Allis and Townshend, has opened in that city a course of examinations upon the lectures delivered in the Jefferson College, commencing April 2nd ensuing. $30 per course. Office students (including examinations), $100. This is one of the practical methods of "elevating the profession." The gentlemen connected with the Spring Course of Rush Medical College are undertaking a similar work. The college sessions are long enough — let the interim every where be filled up by daily recitations and clinical teaching.

Periodical Headache.

Dr. L. G. A., in common with many others, wishes *more light* on the subject of periodical headaches, as connected with menstruation — one of the most annoying tribulations to which females in this latitude and longitude are subjected. The book writers say little about it, and practically seem to know less. We should like at least a dozen communications, of a practical character, on the subject.

Memorandum

For the information of persons desirous of entering the Medical Corps of the U. S. Army.

[EXTRACTS FROM LAWS OF THE UNITED STATES.]

ACT OF CONGRESS, *Approved* JUNE 30, 1834.

"SEC. 1. *Be it enacted, etc.*, That from and after the passing of this Act, no person shall receive the appointment of Assistant Surgeon in the Army

of the United States, unless he shall have been examined and approved by an Army Medical Board, to consist of not less than three Surgeons or Assistant Surgeons, who shall be designated for that purpose by the Secretary of War; and no person shall receive the appointment of Surgeon in the army of the United States, unless he shall have served at least five years as an Assistant Surgeon, and unless, also, he shall have been examined by an Army Medical Board constituted as aforesaid."

ACT OF CONGRESS, *Approved* JULY 28, 1866.

"SEC. 17. *And be it further enacted*, That the Medical Department of the Army shall hereafter consist of one Surgeon General * * * * One Assistant Surgeon General * * * * One Chief Medical Purveyor and four Assistant Medical Purveyors * * * * Sixty Surgeons, with the rank, pay and emoluments of Majors of Cavalry. One hundred and fifty Assistant Surgeons, with the rank, pay and emoluments of First Lieutenants of Cavalry, for the first three years' service, and with the rank, pay and emoluments of Captains of Cavalry after three years' service." * * * *

All candidates for appointment in the Medical Corps, must apply to the Surgeon General, U. S. Army, for an invitation to appear before the Medical Examining Board. The application must be in the hand writing of the candidate, stating age and birthplace, and be accompanied by testimonials from Professors of the College in which he graduated, or from other physicians of good repute. If the candidate has been in the Medical service of the Army during the war, the fact should be stated, together with his former rank, and time and place of service, and testimonials as to qualifications and character from officers with whom he has served should also be forwarded.

Candidates must be graduates of some regular Medical College, proof of which must be submitted to the Board before examination, and must be between 21 and 30 years of age.

The morals, habits, and physical and mental qualifications of each candidate will be subjects for careful examination by the Board, and a favorable report will not be made in any case in which there is a reasonable doubt.

The following will be the general plan of examination:

1. A short essay, either autobiographical or upon some professional subject — to be indicated by the Board.

2. Physical examination. This will be rigid, and each candidate will be required to certify "*that he labors under no mental or physical infirmity, nor disability of any kind, which can in any way interfere with the most efficient discharge of his duties in any climate.*"

3. Examination as to general aptitude and education.

4. Written examination on anatomy, physiology, hygiene, surgery, and practice of medicine.

5. Oral examination on each of the above mentioned subjects, and also on obstetrics, general pathology, chemistry, toxicology, medical jurisprudence and materia medica.

6. Clinical examination, medical and surgical, at a hospital.

7. Performance of surgical operations on the cadaver.

The Board will deviate from this general plan whenever necessary, in such manner as they deem best to secure the interests of the service.

The Board will report the merits of the candidates in the several branches of the examination, and their relative merit in the whole, according to which, if vacancies occur within two years thereafter, *the approved* candidates will receive appointments and take rank in the Medical Corps.

An applicant failing at one examination, may be allowed a second after one year, but not a third.

No allowance will be made for the expenses of persons undergoing examination, as this is an indispensable prerequisite to appointment, but those who are approved and receive appointments will be entitled to transportation on their obeying their first order.

If the result of the examination of a candidate be satisfactory, he will be offered a contract for duty as Acting Assistant Surgeon until such time as he can be appointed or commissioned as Assistant Surgeon.

The pay and emoluments of Surgeons and Assistant Surgeons are shown by the following table:

	Pay per month.	No. of rations per day.	Amount of rations per month.	SERVANTS.					Aggregate amount receivable.	FORAGE FURNISHED FOR HORSES WHEN ACTUALLY KEPT	
				No. for which pay is allowed.	Am't allowed for pay per month.	Am't allowed for clothing per month.	Am't allowed for rations per month.	Total amount allowed per month.		In time of war.	In time of peace
Assistant Surgeon, under three years' service - -	$53.33	4	$36	1	$16	$6.50	$9	$31.50	$120.83	2	2
Assistant Surgeon, over three years' service - - - -	70.00	4	36	1	16	6.50	9	31.50	187.50	3	2
Assistant Surgeon, over ten years' service - - - -	70.00	8	72	1	16	6.50	9	31.50	178.50	3	2
Surgeon, under ten years' service - - - - - -	80.00	4	36	2	32	13.00	18	63.00	179.00	4	2
Surgeon, over ten years' service - - - - - - -	80.00	8	72	2	32	13.00	18	63.00	215.00	4	2

In addition to the above, Surgeons and Assistant Surgeons are allowed an additional ration per day, after the termination of every five years service.

Quarters and fuel, or commutation therefor, are also furnished to medical officers.

The number of vacancies now existing in the Medical Corps of the Army is thirty-nine. [*Vide* advertising pages.]

JOS. K. BARNES,
Surgeon General, U. S. Army.

WAR DEPARTMENT,
SURGEON GENERAL'S OFFICE,
January 1, 1868.

LOOT.

Blanching of the Hair.

A paper read before the Royal Society, London, by Mr. Erasmus Wilson, has thrown new light on the question as to what causes the sudden whitening of the hair, often produced by fright or profound grief. He cites a case in which the hair was colored white and brown alternately from end to end. The white segments were about one-half the length of the brown, and the two together measured about one-third of a line. Under the microscope, the colors were reversed, and it was obvious that the opacity of the white portion was due to a vast accumulation of air globules packed closely together in the fibrous structure of the hair, as the medulla. There was no absence of pigment, but the accumulation of air globules veiled and obscured the normal color and structure. Mr. Wilson suggested the possibility of the brown portion being the day growth, and the white portion the night growth. He also said, in reference to the sudden blanching of the whole hair, of which there were many cases on record, that during the prevalence of a violent nervous shock the normal fluids of the hair might be drawn inward toward the body, in unison with the generally contracted and collapsed state of the surface; and that the vacuities left by this process of exhaustion might be suddenly filled with atmospheric air. An interesting discussion followed the reading of the paper. Dr. Sharkey alluded to a recent case of sudden blanching of the hair reported by Dr. Landois, of Griefswald, in Virchow's *Archiv.*, which was ascertained to be the result of an accumulation of air globules in the fibrous substance of the hair.

Chemistry in Medical Jurisprudence.

A man was tried for murder in the city of Dublin. The

poison used, as charged, was *Hydrocyanic acid, Prussic acid.* The prosecution had all its own way, until the last moment, and the judge was charging the jury adversely to the prisoner. Christison, who was employed by the defence, had not arrived, in consequence of adverse winds delaying him on his passage from England to Ireland. This was before steamboats were known. At the critical moment we speak of, the toxicologist made his appearance in court. The judge, as a matter of justice to a man whose life was so critically and fearfully jeopardized, permitted the case to be reopened for the defence.

"My Lord," demanded Christison, "I respectfully request that you will place a portion of the saliva from your mouth on this plate."

His Lordship did as requested. Christison applied his tests to the saliva, and exhibited to the astonished judge, counsel and jury, precisely the exact results as the tests used by the experts for the prosecution in proving the presence of the poison in the supposed murdered person!

On the Production of Sexes.

M. Coste has been led to doubt the truth of the hypothesis propounded by M. Thury, which supposes that every egg passes, during the period of its maturation, through two successive but continuous phases, during each of which it has a different sexual character. If fecundated in the first half, it would be a female; if in the latter, a male. From experiments on fowls, the author shows that the sexes are produced indifferently from eggs taken at the beginning, middle, or end of the laying. With regard to rabbits, M. Coste finds the same irregular results; in fact, altogether a larger number of males were born at the commencement of maturation. M. Thury's law is therefore not applicable to such mammals or to birds. The author is continuing his experiments to determine whether it holds good even in the bovine mammals, which M. Thury made the subject of his investigation.

A Simple Method of Protecting Water from the Action of Lead Pipe.

Dingler's Polytechnisches Journal publishes a simple method, brought forward by Dr. Schwarz, of Breslau, for preventing the poisonous influence of lead pipes on water, by forming on the inside surface of the pipes an insoluble sulphuret of lead, which has proved so effective, that, after simple distillation, no trace of lead can be detected in water which has remained in the pipes for a long time. The operation, which is a very simple one, consists in filling the pipes with a warm and concentrated solution of *Sulphuret of potassium* or *sodium*. The solution is left in contact with the lead for about fifteen minutes. Commonly, a solution of *Sulphur* in *Caustic soda* will answer the purpose, and produce practically the same results. It is known that *Sulphuret of lead* is the most insoluble of all compounds of lead, and nature itself presents an example which justifies the theory of Dr. Schwarz, since water extracted from the mine of Galena does not contain lead, a fact which has occasioned surprise.

Neuralgia Mixture.

Take *Quinia*, two drachms; tincture *Aconite*, two drachms; tincture *Gelsemin*, one drachm; *Ferri prussiate*, two drachms; neutralizing mixture, twelve ounces; simple syrup, twenty-five ounces. Mix. Dose, a teaspoonful every two or three hours.

To Remove Freckles.

A French Journal recommends the following: Take *Napthaline*, ten parts; *Biphenate of soda*, one part; tincture of benzoin, cologne, each two thousand parts. Mix. A tablespoonful of this is to be added to a glass of cold water, four to eight fluid ounces, and the face then bathed with it every night and morning.

Ulceration of the Tonsils.

Dr. G. W. Champ recommends the following wash as most effectual in ulceration of the tonsils, or apthous affections of the mouth: Take *pulv. Sulphate of zinc* and *Chlorate of potash*, of each, two drachms; strong sage tea, half a pint. Mix. Gargle the throat frequently.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—APRIL 15, 1868.—No. 8.

EXPERIMENTAL MEDICINE.

Experimental Researches into the Subject of the Action of Phosphorus upon Living Tissues.—Reflections upon the Pathogenesis of Fatty Transformations. By Dr. L. Ranvier, Paris.

TRANSLATED EXPRESSLY FOR THE JOURNAL, BY WALTER HAY, M.D., CHICAGO.

Fatty transformations are so common, and are surrounded by so great obscurity in their pathogenesis, that the means for producing them experimentally become necessarily very interesting. Since it became known that *Phosphorus*, introduced into the economy, determined, in the liver, the kidneys, the muscles, etc., fatty transformations, complete and very rapid, numerous investigations have been undertaken upon poisoning by this substance.

Since the memoir which we published in 1863,* in which is published a complete history of the question up to this epoch, new observations have been published. Several have chosen this subject for their inaugural theses; certain professors have

* Fritz, Ranvier et Verliac. De la Stéatose dans L'Empoisonnement par le Phosphore. Arch. Gen. de Méd., 1863.

treated it in their instructions; * but no new opinion has been advanced in France touching the pathogenesis of these fatty transformations.

The same can not be said of Germany, where several (three) authors have occupied themselves with the mode of action of *Phosphorus* upon the tissues, in producing in them fatty transformations. Only, in place of seeking to clear up, by means of experiment, the obscurity which rests upon the subject of fatty transformations in general, they have made experiments, with a preconceived theory, upon the pathogenesis of fatty transformations. This theory originated in Berlin. Indeed, after having studied the inflammatory lesions of some organs (the liver, kidneys, and muscles,) Virchow classifies these lesions, according as they involve the connective stroma of these organs, or their special histological elements.

In the first case, the predominant phenomenon is a multiplication of the cellular elements of the connective tissue of the stroma; and the inflammation characterized by this phenomenon receives the name of *Interstitial.*

In the second case, the special histological elements, hepatic cells, epithelium of tubuli uriniferi, and striated fasciculi, after having presented some characteristics of proliferation, and having been infiltrated with an albuminoid substance, undergo fatty transformations. The inflammation manifesting itself essentially by this phenomenon, has been designated under the name of parenchymatous; and the fatty transformation

* Lancereaux, Etude sur la Déginérescence Graissense des Elements Actifs du Foie, des Reins, et des Muscles de la vie Animale dans L'Empoisonnement par le Phosphore, Union Méd., 1863.

L. Branet. De L'Empoisonnement Aiga par le Phosphore, th., 1863.

E. Fabre. De la Dégénérescence Graissense dans L'Empoisonnement Aiga par le Phosphore, th., 1864.

Cornil et Bergeron. Altération Granulo-Graissense de L'Epithélium des Glandes de L'Estomæ dans un Cas de L'Empoissonnement par le Phosphore. (Soc. de Biol., 1865.)

Tardein. Leçons sur L'Empoisonnement par le Phosphore. (Gaz. des Hôp., 1864.)

Blachez, la Stéatose, th. agr., 1866.

becomes the most important sign of this sort of inflammation. If it has not always been taught in the school, that the fatty transformation of the muscles and of the tubuli uriniferi, for example, manifests always inflammation, at least one is induced to suppose an inflammatory origin to these alterations, in the absence of every other cause.

Moreover, a pupil of this school, Dr. Mannkopff,* maintains that in poisoning by *Phosphorus*, the fatty transformations depend upon an inflammation determined by the irritant action of the toxic matter. He relied especially upon the examination of the liver and kidneys, which, according to his observations, should present, at the same time with the steatosis, hypertrophy of their stroma.

Since I became acquainted with the opinion of this author, I have examined, with the greatest care, subjects poisoned by *Phosphorus*, and animals which I have subjected to intoxication by this substance, to determine whether the stroma of the kidney and of the liver presented any hyperplastic thickening; and I must say that my researches into this subject have always met with negative results. I believe that some error has crept into the observations of Dr. Mannkopff: close attention is necessary, and also excellent lenses, in order to appreciate slight hyperplasias of conjunctive tissues which occupy the spaces left between the canaliculi uriniferi and the hepatic cells; for these spaces are traversed by vessels whose nuclei and sanguineous globules can, after hardening in chromic acid, deceive by their size, insufficient for corpuscles of connective tissue.

Virchow † himself maintains the inflammatory nature of

* Mannkopff, Beitrag zur Lehre von der Phosphore Vergiftung. (Wein Méd. Wochenseh, 1863.)
Barjau. Wiener Zeitschr. der Aerzto., 1863.

† Tiingel. Arch. de Virchow, 1864.
Virchow. *Id.*, 1864.
Ludwig Meyer. *Id.*, 1865.
Klebs. *Id.*, 1865.
Pastau. *Id.*, 1865.
Vohl. Berl. Klin. Wochensch, 1865.

fatty transformations, determined by *Phosphorus;* for, having discovered in the stomachs of subjects dead from poisoning, a fatty transformation of the pepsine glands, he considered it the result of the irritant action of *Phosphorus*, and designated it gastro-adenitis. This mode of opinion has been sanctioned in Germany; and in a recent work, Dr. Hugo Senftleben * admits it without any discussion. It is, however, very open to discussion.

First, then, it is known that *Phosphorus* ingested does not always determine inflammatory lesions of the gastro-intestinal mucous membrane; for, in a number of autopsies, there has not been found, in the stomach or in the intestines, the least inflammatory lesion. In some cases, however, hyperæmias, and even ulcerations, have been observed. I have myself met with ulcerations of the gastric mucous membrane, in a dog to which I had administered *Phosphorus* in solution in *Sulphuric ether.*

In order to produce hyperæmia of the gastric mucous membrane, it is not necessary to administer *Phosphorus* by the digestive canal; for Dr. Senftleben states that he has observed congestion of the duodenum and stomach, in animals that had died in consequence of injections of *Phosphoretted oil* into the cellular tissue. In these cases, the stomach and intestine contain an unctuous substance of a grayish color, formed of epithelial cells, filled with fatty granulations.

That similar lesions exist in the digestive canal, does not follow solely as a direct result of the action of *Phosphorus;* for these lesions could very well depend upon the corrosive action of the gastric juice upon the mucous membrane, denuded of its epithelium. Indeed, does not the fatty degeneration of some of the glands of the stomach and of the epithelial investment of the gastro-intestinal mucous membrane, leave the denuded surface without defence against the irritant action of the gastric and intestinal juices? It is well known that embolias of the capillaries of the digestive mucus membrane, and pemphigus of this surface, give origin to ulcerations of rapid

* Hugo Senftleben. Arch. de Virchow, 1866.

progress, explained by the presence of the gastric juice. I have met, in the case of an old man, with a fatty transformation of a portion of the digestive mucous surface, which had occasioned ulcerations accompanied by hæmatemesis.* It is clear that in these different cases, the epithelial investment no longer exists; the mucous chorion, being no longer protected, has been attacked by the gastric juice.

Moreover, do not the experiments of Senftleben combat the idea of gastritis by the irritant action of *Phosphorus*, since, in these experiments, the toxic element has not been placed in contact with the gastro-intestinal mucous membrane? It seems logical, then, to admit that the fatty *débris* found in the digestive canal, consists of degenerated and desquamated epithelium; and that the redness of the mucous membrane results from the irritant action of the juices upon the denuded surface.

In some case, moreover, it has been determined that the mucous surface has presented neither redness nor ulceration; although the glands had undergone fatty transformation. It might be that in these cases the alteration was in its incipiency, or that all the glands, having undergone degeneration at the same time, could not any longer secrete the corrosive juice. This is, however, merely an hypothesis which may be hereafter verified or falsified by facts.

I come now to the experimental portion of this work.

In order to form an opinion touching the irritant action of *Phosphorus* upon living tissues, it suffices to place some fragments of this substance under the skin and between the muscles of different animals, and to observe whether they determine there the phenomena of inflammation. My experiments have been made upon the frog, the guinea-pig, and the rabbit. I have proceeded in the following manner: I cut from a stick of *Phosphorus*, a small, regular cube, taking care that there remained upon its surface no portion of the coating of white dust, which always covers *Phosphorus* preserved in water, exposed to the light. I measured this little cube, thus

* Bull. de la Soc. Anato., 1863.

obtained, and slipped it through a sub-cutaneous incision into the locality where I desired it to remain.

FIRST SERIES OF EXPERIMENTS.

On the 13th of September, I took three frogs, equally large and vigorous. I cut from a stick of *Phosphorus*, three cubes, having sides of one millimetre in length. These fragments were placed, one between the posterior muscles of the leg of one of the frogs, another under the skin of the loins of another frog, and the last was pushed into the œsophagus of the third frog. These animals were placed in different vessels, and placed in a cool situation. Other healthy frogs were preserved under similar conditions.

During the following days, up to the 30th of September, these different animals presented nothing worthy of note.

Experiment 1. — The first of October, I watched the death-struggle of the first frog. The animal was in a state of muscular relaxation, interrupted, from time to time, by certain slight convulsive movements. Death supervened an hour after the beginning of my observation.

The fragment of *Phosphorus* remained in the position where I had placed it. It had preserved its transparency; its angles remained sharp. I could not establish any very perceptible diminution in its dimensions; from which it is necessary to conclude that the quantity of matter absorbed had been very small. The muscles of the leg in the midst of which the *Phosphorus* was found, presented no swelling or redness. Under the microscope, the nuclei were not augmented in number; and their primitive fasciculi were spangled with fine fatty granulations, occupying the depressions left between the elementary fibrillæ.

The presence of fatty granulations in the muscular fasciculi in the neighborhood of the piece of *Phosphorus*, could have been attributed to a toxic action, either local or general. To determine this, I examined the other muscles of the same animal, and found in them fatty granulations, in number just as considerable.

The fatty transformation of the muscles, then, could not, therefore, be attributed to the local action of the *Phosphorus*. In order to judge the second part of the question, I examined the muscles of a healthy frog; and I observed that all the muscular fasciculi of this frog contained fatty granulations. I continued this investigation in all the frogs which I could procure at that time, and I observed that all of them had granulo-fatty muscles.

When, therefore, any one may make, in the autumn, experiments upon frogs, having for their object the determination amongst them of fatty transformations, it is necessary to be acquainted with this physiological condition of the muscles. Recently, there has appeared in the "Journal" of M. Schulze, a work, apparently detailed by A. Stuart, upon the fatty transformations of muscles supervening upon the application of irritating substances. Almost all the experiments of this author have been conducted upon the frog; and, moreover, he seemed to be ignorant that in autumn these animals have their muscles loaded with fatty granulations.

The liver, the kidneys and the heart of the frog which we examined at that time, presented, to the naked eye and to the microscope, the characteristics of complete fatty degeneration. The liver was of a yellow color, its volume was nearly doubled, its edges softened; its cells not destroyed at any point, but loaded with little drops, and with fine fatty granulations. The kidneys were furrowed with yellowish stripes, and the epithelial cells of their tubeli were infiltrated with fat.

Experiment 2. — The second frog died on the 8th of October, twenty-five days after the introduction of *Phosphorus* under the skin of the lumbar region. I discovered the fragment in the position where I had placed it. It had undergone no apparent alteration, nor had it determined any inflammation in its neighborhood; not the least adhesion, no redness, no serosity. The muscles presented the same characteristics as those of the preceding frog. The viscera were in a state of advanced fatty degeneration.

Experiment 3. — The third frog died the next day, the 9th

of October, twenty-six days after the introduction of the *Phosphorus* into the digestive canal. I did not discover the fragment, either in the stomach or in the intestine. It was probably rejected. I did not determine any alteration of the gastro-intestinal mucous membrane. The muscles were granulo-fatty; the kidneys and liver were completely degenerated.

(*To be continued.*)

A CASE OF SHOULDER PRESENTATION.

BY B. F. ROSS, M.D., SOUTH PASS, ILL.

[Noticing in the JOURNAL of the 1st inst., the "Report of a Case of Instrumental Delivery" in a case of Shoulder Presentation, in which the writer asks some "sage practitioner" to suggest a better method than amputation, I concluded to forward the notes of a somewhat similar case to you,—not claiming to be a sage amongst the members of the profession, however,—for your consideration and disposal.]

Mrs. H., aged 34, of a moderately strong constitution, and who had given birth to six children—the third child presenting the shoulder, and the physician in attendance amputated the arm at the shoulder—was again seized with labor pains about one o'clock A.M., April 2nd, 1865. There being no physician within five miles of her residence, a midwife was called in at three o'clock A.M.; the liquor amnii having been discharged about one hour before her arrival. Thinking that all things were doing well, she did not make an examination until the lapse or two or three hours, when, to her great astonishment, she found the hand protruding from the mouth of the womb. Not knowing what to do in this dilemma, she concluded to wait, hoping—as she expressed it—that something would turn up. The fates not favoring her, however, she concluded, at five P.M., to call for a physician. I was accordingly called at six o'clock. On making an examination,

I found the right shoulder presenting, with the head towards the right acetabulum, the right arm in the vagina close to the os externum, and grasped by the os uteri as firmly as though it had been placed in a vice, very much swollen and discolored. After repeated attempts to introduce my hand, I concluded that it was impossible to turn it without first placing the patient under the influence of chloroform, which I did not have, nor could get short of Jonesboro, some ten miles distant. On stating my opinions and conclusions to the friends, they insisted I should amputate, as Dr. P. had done in the previous case. This I could not consent to do. Owing to circumstances over which I had no control, I did not get the chloroform until the middle of the next day. I in the meantime had called to my assistance Dr. Dodds, of Anna, who administered the chloroform; and when perfectly under its influence, I again introduced my right hand, and finding it impossible to get my hand above the elbow of the child's arm without using more force than I thought prudent, I grasped the arm at the elbow as firmly as I could, and pushing steadily and firmly upwards and a little to the left, I soon had the satisfaction of feeling the arm ascend gradually into the womb, which I found perfectly relaxed. As soon as I found my hand in the cavity of the womb, I loosed my hold on the arm, and gliding my hand along the breast and abdomen of the child until I came in contact with the right leg, which I grasped by the knee, and completed the version by bringing down the foot, without waiting to hunt for the left foot. As soon as the patient had recovered from the influence of the anæsthetic, I gave her *Pulv. ergotæ*, ʒ ii, and in the course of fifteen or twenty minutes the womb had commenced to contract forcibly, and the child was delivered in about one hour. It may be urged that, inasmuch as I did not save the life of the child, I might as well have amputated the arm; but to this objection I would answer, that if I had been able to get the chloroform as soon as I could have reasonably expected, I think the result, so far as the child was concerned, would have been different. The mother made as good a recovery as could have been expected.

REPLY TO A CASE OF INSTRUMENTAL DELIVERY

Reported by W. Anderson, M.D., Leroy, Ill.

BY E. K. TRAVERS, M.D., AMBOY, ILL.

In the March number of the JOURNAL, there is a case reported by W. Anderson, M.D., of Leroy, Ill., where he was called in consultation with a Dr. D., to a lady in labor, with a shoulder presentation, the head in the left acetabulum, the left arm protruding from the vagina, and very much swollen, so that the insertion of the hand into the uterus was impossible, while the force of the uterus was so great as to prevent an adjustment of the fœtus by bringing the head into the pelvis. The arm, he says, could not be replaced; and he decided, with Dr. D., an amputation unavoidable, which he performed at the shoulder. He also says that he knew the infant was dead before the operation; which, however, did not influence his action.

Now, not having any claim to be a sage practitioner, I suppose I ought to remain dumb; but having had the experience of several such cases, during the last few years, I dare to reply. In the first place, my practice is to put my patient completely under the influence of *Chloroform*, thus quieting the force of the uterus, which allows me to slip my hand up by degrees, persistently resisting all forces, and never withdrawing my hand until after I take hold of the child's feet, and draw them gradually into the world; while the other hand is on the abdominal parieties of my patient, assisting to turn the child. Now, I think there is no necessity whatever to mutilate the child, in such a presentation. I don't consider the arm at all in the way, in turning the child and delivering by the feet; but I do think it useless to try to bring the head into the pelvis, or replace the arm, as I think it can not be done in such cases. My motto is, not to waste precious time in useless endeavors.

The following is the last case of the kind I had: Aug. 25th,

1867, I was called, about 6 P.M., to attend Mrs. T. F., in her third confinement. Labor had already progressed for twelve hours. The membranes had ruptured at 5 A.M., previous to my arrival; and the amniotic fluid escaped. The head of the child was in the right iliac fossa, with the left arm and shoulder presenting, the back of the child directed towards the abdomen of the mother. The arm was very much swollen, and presenting in the vulva. To complicate the case more than this one Dr. Anderson quotes, this woman had a very narrow and contracted pelvis; her first child, which was still-born, had to be taken from her with forceps, after a long and protracted labor of eighteen hours. The cranium was very much compressed, and elongated in coming through the pelvis; but I desisted from using the forceps. Taking these facts into consideration, I made up my mind that I had a very difficult case; and I sent for my friend, Dr. Felker, to whom I am very much indebted for his efficient aid in turning and delivering the child, after first putting her completely under the influence of *Chloroform*. Before the anæsthetic was given, it was impossible to introduce the hand, from the contracted state of the womb. I quote this case, from its similarity to that of Dr. Anderson's.

In connection with this subject, I would add that there is too much and too early an interference with natural labors, with too great a desire to turn them into instrumental ones; and when I think how many innocents are ruthlessly destroyed by either inconsiderate or incomplete accouchers, I shudder. A couple of weeks ago, in this locality, there was a lady in labor for about twelve hours, with a very natural presentation. The labor had progressed until the occiput was presenting at the vulva, with the head pressing on the perineum; when the young man in attendance, without consultation, performed the operation of craniotomy — and then boasted of a great operation! But if this was the only case of the kind, it would be well; but I know of several just such cases. I am sometimes inclined to think that men are induced to commit such uncalled-for operations, for the purpose of gaining a reputation for talents that they do not possess.

FOREIGN CORRESPONDENCE.

PARIS, *February 7th*, 1868.

Chicago Medical Journal:

Many years ago, M. Gillermond published a process for obtaining *Morphine*, then recently discovered, from an alcoholic solution of *Opium*, by means of *Ammonia*. It being rather a costly process, it was not adopted; but in 1849, the son of the discoverer, Dr. Gillermond, of Lyons, showed that it possessed some advantages in the testing of the quantity of *Opium*. Some difficulties in the preparation have now induced the same practitioner to publish an explanatory note on this subject. The process is as follows: Dissolve 15 grammes of *Opium*, by degrees, in 100 grammes of *Alcohol*, and strain the tinctures successively through a cloth into a wide-necked phial, containing 4 grammes of *Ammonia*. After the lapse of twelve hours, the *Morphine* will be found eliminated with a certain quantity of *Narcotine*; the former having coated the glass with colored crystals, large enough to be gravelly to the touch, while the *Narcotine* has crystallized in small white needles, having the appearance of mother-of-pearl. The whole of the crystals are collected on a piece of linen, and well washed with water, in order to deprive them of the *Meconate of ammonia* they may happen to contain. The crystals are taken up again, and thrown into a small receiver full of water. The *Narcotine*, which is lighter than the fluid, will float at the top; the *Morphine*, which is heavier, will fall to the bottom; and the former substance may be separated from the latter by decantation. A good sample of *Opium* should yield at least from 1 gramme 25 centigrammes, to 1 gramme 50 centigrammes of crystallized *Morphine*, for every 15 grammes of *Opium*. The separation of the *Narcotine* from the *Morphine* may not always be complete by this process; but it may

be, if necessary, effected by repeatedly pouring boiling *Ether* on. Dr. Gillermond has improved his process by triturating 15 grammes of *Opium* with 110 grammes of *Alcohol*, at 70-100th's, or 120 cubic centimeters. When the dissolution is complete, which generally takes place in half an hour, the weight of 125 grammes, if diminished, should be made up with *Alcohol;* the solution is then well shaken, filtered into a phial, and a tube, thinned off at one end, being introduced, 2 grammes of *Ammonia* are poured in, so as to reach the bottom without disturbing the liquid. The tube is then quietly removed, and the phial closed; and after standing thirty-six hours, the *Morphine* will be found crystallized at the bottom of the phial.

Were all the cures proposed for hydrophobia, up to this day, collected into a volume, it might equal the largest ever brought to light. But, compared with the vast number of devices put forward for curing the disease when actually caught, suggestions of a preventive nature have been exceedingly few; and this circumstance constitutes the chief merit of an article in the *Tiglo Medical*, a Spanish medical paper. For a long time past, this journal informs us, the peasants of Gallicia have entertained the idea that dogs bitten by vipers, which are very common in that province, are no longer liable to contract hydrophobia, whether spontaneous or inoculated, after recovering from the bite of the reptile. This belief has induced them to endeavor to protect their dogs from the danger of *rabies canina*, by having them bit by vipers when young. If, indeed, the venom of the viper be a preservation against the other virus, the inoculation of the former will, by preventing dogs from contracting hydrophobia, indirectly protect men from being attacked with it. This consideration has induced a Spanish physician, whose name, unfortunately, is not given, to institute experiments with a view to test the efficacy of this preservation, by causing a number of young dogs, five or six months old, to be stung by vipers; and after recovery, to be subjected to the bite of mad dogs. The result was, that in every case the former were found to be insensible to the virus

of hydrophobia, no matter how often or at what period of their lives they were subjected to the ordeal. The sting of the viper would bring on fever, somnolency and uneasiness, increasing for three or four days, and then subsiding in the course of three or four days more. Olive oil, externally and internally administered, would afford some relief. If, five or six months later, the same dog were stung a second time, the only consequence would be a slight tumefaction, without fever; and any subsequent bite by a viper produces no effect whatever. Without venturing to contradict the facts here stated, it is difficult to imagine how they can be reconciled with the process of elimination, which invariably takes place when a poison, introduced into the economy, has not occasioned death. This subject is attracting considerable attention at the Academy of Medicine, and experiments are being instituted to ascertain the value of the remedy proposed.

The *Journal des Connaissances Médicale* notices a book recently published by Dr. Foissac, on the influence of climate and physical agents on man. The author maintains that the human race is cosmopolitan, since it can live every where, and by its intellectual powers neutralize the evil effects of physical agents on its organism. To this, Dr. Caffes demurs, objecting that man does not perpetuate his race under all climates; that he may, it is true, in any climate to which he is taken in the prime of life, but that sterility is often the consequence, and that, at any rate, his offspring will die at an early age. However this may be, Dr. Foissac's book contains much interesting matter; and the chapter on stature comprises a great many new and valuable facts. On this subject, Dr. Latour, in his review of the volume, expresses himself as follows: "No one will maintain that good soldiers are not to be found among small men. During the campaign in Egypt, Moored Bey's vexation would break out whenever he made a few of our brave *voltigeurs* prisoners. 'What!' he would exclaim, 'are these the men that have beaten us? Shall I never be able to vanquish these little fellows?'" Yet, Dr. Foissac maintains, on the strength of highly reliable historical records,

that the inhabitants of ancient Gaul, who were victors and conquerors by turns, but always terrible on the field of battle, were tall and fine men—contrary to Dr. Broca's opinion. To the low or middling stature of Alexander, Napoleon, and Gustavus Adolphus, he opposes the gigantic proportions of Philopœmus, Pyrrhus, Cæsar, Charlemagne, Condé, Peter the Great, and Charles the Twelfth. Most of the generals of the Republic and marshals of the First Empire, such as Championnet, Kleber, Pichegru, Masséna, Soult, Remadotte, Kellerman, Bessiéres, and Ney, were very tall—or, at least, much above the common standard. Dr. Foissac finds the latter condition not only in the case of military men of note, but also in that of great political characters—orators, poets, learned men, and, generally, of most men representing intellectual power; whence he concludes that, save in the case of deformity, genius and talent are independent of physical conformation. Scarron and Pope would seem to nullify even the above restricted clause.

The death is announced, at the age of 92, of M. Carlo Speranza, the Nestor of Italian physicians, formerly Dean of the Faculty of Medicine and University of Pavia. M. Speranza was author of several important works, and was, if I mistake not, corresponding member of the Academy of Medicine in this city.

The *Clinique Européenne* contains the following account of certain experiments made by M.M. Klautoch and Stich, to ascertain the real seat of the sense of taste, which is generally supposed to exist on the whole surface of the tongue, especially the anterior part of that organ, the middle of the dorsum being but feebly endowed with this sense. It seems, from these experiments, that the only portion of the tongue which is sensible to taste, is a narrow space all around. The breadth of this sensitive zone varies in different subjects; in some, it is not more than two lines; in others double that breadth. It rarely extends to the inferior surface. The experiments were as follows: A substance having a strong taste, is first placed on the centre of the tongue, where it produces no effect. It

is then gradually spread out, until the perception of taste is announced; this occurs generally on the border, but in some individuals it begins at the distance of a line from it. The *velum pendulum* of the palate is also sensible to taste; but the pharynx and the tonsils are deprived of the gustatory faculty. This is proved by the fact that if they be touched with stick caustic the patient experiences no taste, provided he keep the tongue and the velum pendulum away from the spot.

The *Abeille Médicale*, in speaking of those soft and elastic dropsical tumors of the skin, called anasarcas, states that *Tannin* has been successfully applied by Dr. Garnier against them. This substance, the astringent principles of galls and other bitter vegetable substances, is administered in solution, in a dose of two grammes per thirty grammes of syrup, diluted with the same quantity of distilled water. Three tablespoonsful per day are given, and the dose gradually increased according to the effect obtained. The *Abeille* quotes three cases in which an almost immediate cure was obtained by this method.

In a paper published by the *Revue Thérapeutique*, Dr. Ozanam treats of substances capable of destroying the adventitious membrane in croup and malignant quinsy. From his experiments and observations, it appears that the best substances for dissolving the membrane are, first of all, *Ammoniuret of copper*, then *Ammonia*, *Soda*, *Urea*, *Cyanide of potassium*, *Chloride of potassium*, *Glycerine*, *Lime water*, and common *Salt*. *Carbonate* or *Chlorate of potash*, and *Phosphate of soda*, are of but slight efficacy. The dissolving agents of great power are: *Chloride of bromine*, *Bromine* itself, and *Chlorine*; then, secondary to these, *Iodine*, *Perchloride of iron*, *Bichloride of mercury*, and *Chromium*, which harden the adventitious membrane, and detach it in a mass, without severing its elements. Dr. Ozanam is of opinion that sea-water, which contains *Bromine* and the elements of the mother-ley of *Soda*, extracted from *Wrack*, is an excellent remedy in all cases of bad sore-throat; but he prefers *Bromine* to all

others, not only as a powerful dissolvent, but also because it exerts an elective action on the fauces, the velum pendulum, palate, and the larynx. *Bromine* possesses another valuable property: like *Chlorine*, it destroys contagion, besides being more manageable. With its emanations, the air may be purified, the dormitories and whole houses protected from contagion, at an insignificant expense. But as it is a most powerful agent, it can not be used in a pure state. It should not be employed under the forms of a tincture, because new compounds are then formed; nor should it be administered in tea, for it would then fix itself upon the vegetable principle, and lose all action. The way to use it is to make an aqueous solution, in the proportion of a drop of *Bromine* to an ounce of water, to be kept in a dark place, and in a closed phial. This solution must be renewed as soon as it loses its amber hue. It is administered in drops every hour, and taken in spoonsful of sugar and water, so as to give from one to two grammes of the solution in the course of twenty-four hours.

M. Pouchet combats the opinion of some physiologists who are willing to admit that certain animals may survive after being completely frozen. From numerous experiments made on several species of animals, he comes to the conclusion that there always takes place, in the congealed part, besides concontraction of the capillary vessels, an alteration of the blood globules, characterized by the disappearance of the nucleus in the reptiles, and by the appearance of crenelated projections in mammalians. Thus altered, the blood globules can not fulfill their functions, and the life of the animal is all the more in jeopardy, that the number of altered globules flowing in the current of the circulation is large. If a portion of the body of an animal be congealed, and maintained in that state, the animal may live a long while yet, owing to the altered blood being unable to mix with the circulatory current, on account of its having lost its fluidity; but death soon occurs, after the frozen parts are thawed out; the altered globules mixing, in great quantity, with the remaining portion of the sanguineous fluid. In every case of congelation, death is due to the altered

state of the blood, and not to the stupefied condition of the nervous system.

The discussion on tuberclosis is still going on, at the Academy of Medicine. No new facts have been elicited on that subject, although several ingenious and plausible theories have been brought forward. In my next letter, I will give you an outline of the debates held on that obscure though most important subject. N.

A CASE OF ACCIDENTAL HÆMORRHAGE.

BY DE LASKIE MILLER, M.D., PROF. OBSTETRICS, DISEASES OF WOMEN, ETC., RUSH MEDICAL COLLEGE.

Mrs. L., aged 40 years, the mother of six children, the last confinement, January 1, 1866, had aborted twice. Was advanced about seven months in her ninth pregnancy, which had been unattended by any unusual symptoms, when, on January 25th ult., at about 3 o'clock, P.M., she was suddenly attacked with fainting — a sense of distension of the abdomen, great anxiety, but without pain.

I saw her at 5 o'clock, about two hours after the attack; found her in an alarming condition, and presenting the following appearance and symptoms: remarkable pallor of the face; lips apparently bloodless; pulse hardly perceptible at the wrist; surface cold, frequently yawning; abdomen greatly enlarged and tense, with no resonance on percussion; slight hæmorrhagic discharge from the vulva; os uteri dilated sufficiently to admit the extremity of the index finger only, and not dilatable with moderate force.

The conclusion at once reached was, that the symptoms were due to internal hæmorrhage, the result of placental rupture or detachment.

On inquiry learned that no accident had happened which would be likely to cause the separation of the placenta from its attachment with the uterus. The only circumstance to

which the detachment could be attributed was inordinate laughter, at dinner, between one and two o'clock, P.M.

The danger appearing imminent, by my order the foot of the bed was elevated about eight or ten inches. Administered a full dose of the *Fl. Ext. of Ergot.* Applied uniform pressure over the abdomen; introduced the colpeurynter and distended the upper part of the vagina forcibly, to dilate the os uteri, and excite uterine contractions, but dilatation to a slight degree only was effected, and no labor pains were induced. I then withdrew the colpeurynter, and passed a catheter through the membranes. As the liquor amnii flowed away, slight uterine contractions could be detected. The dilatation of the os uteri was accelerated by mechanical force, applied by inserting and separating the fingers, not having a more efficient "dilator" at my command. The os yielded slowly; when it had reached about the size of a crown piece, coagulated blood began to escape in great quantity. Without the means of estimating the quantity accurately, I can only say, it was sufficient to account for the prostration, fainting, etc. With this discharge the abdomen diminished in size rapidly, contractions increased in force slightly, which brought the child within reach of the finger, when the presenting part was found to be the right shoulder. Notwithstanding the great loss of blood and consequent exhaustion of the patient, the os uteri was not sufficiently dilated or dilatable to admit the hand, for the purpose of version and prompt delivery. As delay would surely increase the danger, the blunt hook was passed over the pelvic extremity of the trunk, and sufficient traction made to bring this part down, and the delivery of the fœtus was effected without delay. The placenta followed immediately, and presented evidences of having been separated for some time. *Ergot* was repeated, and a binder firmly applied; stimulants were administered; the head kept low. By careful management the patient recovered slowly but perfectly.

This case presents several points of interest:

1st. The slight cause of the accident, viz.: a fit of laugh-

ter. I give this as the cause, for it could be attributed to no other. The patient was the wife of one of our most wealthy citizens, and not subject to the casualties incident to laborious pursuits.

2nd. The sudden appearance of dangerous symptoms: characteristic of loss of blood.

3rd. The importance of perforating the membranes, in cases like this, where delay increases the danger, and over distension prevents uterine contractions.

4th. The utility of the blunt hook in transverse presentations like this, in effecting version and prompt delivery, when the hand can not be introduced sufficiently to effect the object.

5th. The difficulty in effecting dilatation of the os uteri, so unusual in cases of extreme exhaustion from loss of blood.

OCCLUDED ANUS.

BY H. A. CHASE, M.D., VIROQUA, WISCONSIN.

In September, 1867, I was called to attend Mrs. A., in labor with her first child. After a somewhat protracted labor she was delivered of a male child. Five hours after completion of the labor I called and was informed by the nurse that the child had been vomiting for some time, and there had been no passage of the meconium, but in passing its urine it had passed dark specks per penis. Upon examination I found the anus absent, the raphe or median line extending as far back as the tip of the coccyx. I could detect no pouching of the intestine. Having decided to operate, I passed a straight narrow bladed bistoury in the direction of the rectum, but failed to establish an exit for the retained matter.

The child lived several days passing small quantities of meconium by the penis.

After death, permission having been granted, I made an examination and found the bladder distended with meconium.

The descending portion of the colon, instead of ending in the sigmoid flexure, ended in the bladder, with entire absence of rectum. All the other organs were well formed. The father informed me that when fourteen years of age he had an attack of diarrhœa that run along for several days, and then instead of passing the fæcal matter per anus, for three days he passed it all per penis, and had no stool the usual way during that time. He informed me the matter he passed had the same smell and look as fæces, and was passed in large quantities. At the end of three days he had regular stools every few hours, and his urine became clear.

EDITORIAL.

News Items.

Prof. E. S. Carr has resigned his position in the University of Wisconsin.——It is said a new Medical College is being organized in Detroit, Michigan, to offset, probably, the Ann Arbor *fiasco*.——H. H. Childs, M.D., long connected with Berkshire Medical College, is dead.——The Legislature of Wisconsin, at the instance of Dr. D. C. Davies, of Portage City, has passed a liberal law legalizing dissections. Also, to prohibit quacks from giving testimony in courts on medical matters, and from collecting fees. Other stringent legislation, at our last advices, was contemplated. Dr. D. is an energetic worker, and will make his mark in the State of his choice. ——Rush Medical College appears to have had the largest graduating class at its recent commencement as yet reported. The facilities for medical instruction and observation in this city can scarcely be surpassed, at the present time, in any Atlantic city. When the dog in the manger stops howling, there will be no difficulty in rivaling the proudest cities of the old world. God speed the day, even though it result in a Governor or Congressman.——Our friend, D. C. Warner,

M.D., has established a first class Pharmacy and Dispensing Drug Store, on the corner of Indiana Avenue and Twenty-Third Street. This will be good news to the denizens of that rapidly growing division of Chicago. The Doctor can be relied on "every time," either as physician, druggist or dentist. (This latter is the editorial soliloquy.)

Indiana State Medical Society.

INDIANAPOLIS, March 29, 1868.

Editor Chicago Medical Journal:

Please mention in your April number that the Indiana State Medical Society will meet at Indianapolis, on Tuesday, May 19th, 1868.

Very respectfully,

L. D. WATERMAN,
Sec. Ind. St. Med. Soc.

A Card.

We smell a little brimstone and saltpetre under the following, which comes to us from Nashville:

A CARD.—As Rev. J. B. Lindsley and Doctors C. K. Winston, W. T. Briggs and W. K. Bowling have attempted to divest me, in an illegal manner, of my rights as a Professor in the Medical Department of the University of Nashville, and have made a parade of the matter in the newspapers, I hereby inform the public that I will seek redress in due time, through the courts of justice.

T. R. JENNINGS, M.D.,
Prof. Anat. in Med. Col. Univ. of Nashville.

"In the name of the Prophet—Figs!" we command the peace. This is a vermilion edict.

University of Michigan. The Bribe Accepted.

In secret executive session, on the evening of March 25, important action was taken by the Board of Regents of the University of Michigan. We extract from latest dispatches:

"The legislature, last winter, provided for a State appropriation of about $18,000, conditioned upon the organization of a

homœopathic school in connection with the present medical department. The Board of Regents accepted the terms, and, by resolution, created the Michigan School of Homœopathy, to be located at such place, suitable in the eyes of the Regents, other than Ann Arbor, as shall pledge to the Board of Regents, by June 29 next, the greatest amount for the buildings and endowment of said school. The resolution also appointed Dr. C. J. Hempel, of Grand Rapids, professor of Theory and Practice of Medicine in said school, and provided for the appointment of another professor before the commencement of the first term, the salaries of each being $1,000. There is also appropriated $3,000 more for the support of the school, and such other professors will be appointed as may be necessary."

We are the more pleased to lay this news before our readers, in advance of all contemporaries, because it will prove of especial interest to those gentlemen of the Michigan Preparatory School, who sat up until, to them, an unusually late hour (11½ P.M.) to hear the news.

The sessions of the Board, ordinarily being public, much tribulation was engendered because the gentlemen composing the present Medical Faculty, were not admitted to the meeting which involved this extraordinary, but not unexpected, conclusion. It is a somewhat singular fact that *ten minutes* after the expectant outside guardians of medical interests in Michigan gave up the watch in despair, the Regents quietly withdrew, each man to his own *ranche*, like the Arabs at nightfall, or rather at midnight, "stealing silently away." Our sympathies, ever in the ascendant, are extended to the outside waiters, who, perhaps scarcely virgins, yet had no oil in their lamps, to see when the Regents (*nomina clarissima*), as on a previous notable occasion, accomplished a deed of darkness, and under its inky shadow "changed their base," this time to the chagrin of D—s, as aforetime for his jubilation.

> "*The mills of the gods grind slowly,*
> *But they grind exceeding small.*"

This time small pills! Rats desert a sinking ship; the cockroaches and pismires are not so rational.

One is dead, (*de mortuis nil, etc.*), the "chancellor" is eating *sauer kraut* in a Berlin hostelrie, the other of the trio waits, like a baffled conspirator, "hoist with his own petard," black in the face where nature herself put the unmistakable stamp, and blackened, beyond Ethiopic darkness, by cultivation of all the foul arts which Mephistophiles himself would blush to own.

Hang on to your position, Black Knight, with your visor down, your lance and shield are broken!

Without *equivoque*, or uncertain phrase, the Medical Department of the University of Michigan, owes its present humiliation to its own precedents — its own folly. Scorning the will of the profession, and seeking only the advancement of individuals without merit, save that "raying out the darkness" of backstairs influence and kitchen chicanery, it trusted its fortunes to a trio, who, to put it mildly, have been weighed in the balance and found wanting.

Its large classes have been trumpeted as evidence of merit, whilst notably they have been collected by the ignoblest motives which could sway the student — the mere absence of fees. When once ensnared by this fancied advantage, the unfortunate recipient of University charity soon found that even in this he was deceived. Hence, few sought its honors (?), but went elsewhere to secure the doctorate. Meanwhile, personal jealousies, and the pittance doled out as salary to the individual members of the Faculty, drove from among them those whose services were really valuable. Itinerants and local nonentities took the positions, and, *ex necessitate rei*, influence departed.

The President of the University formally and nobly protested against accepting the bribe offered by the legislature, but the emasculated Medical Faculty squeaked only in childish treble of opposition, when they should have united in one grand chorus of scorn and indignation. Could human feebleness be more vividly illustrated than in that midnight watching by the outer door of the Star Chamber, and then, after this last wanton insult to a noble profession, the rulers of the

University sneaking noiselessly away from the mousing sycophants, who, until somnolence overtook them, watched and waited, like *Scholastikos*, for the river to roll by!

Sleep on, now, immortal imbeciles!

This giant fraud upon the profession will every where be trumpeted as a triumph of Lilliput. It will be published in Gath and *howled* in the streets of Askalon. But we put it on record that no general belief in Homœopathy, either "pure and simple," or, as latterly, *mixed*, had any thing to do with this farcical *denouement*.

The diploma of Doctor of Medicine from the University of Michigan, will hereafter give more trouble in the analysis than the identity of the two Dromios. The absurd device of putting the homœopathic branch in some other town than Ann Arbor, is too shallow for consideration. The diplomas will and must be issued under the broad seal of the University, and the Hempel professorship will prove a *hempen* rope which will hereafter strangle its professional respectability.

We congratulate those honorable professional gentlemen, Professors Armor and Ford, that in good time they left the concern. Will the others be *Green* enough to remain?

Fluid Extracts.

The attention of physicians has been turned of late to the general unreliability, and, sometimes, entire worthlessness of the fluid extracts in common use. This inefficiency may be due to the quality of the drug used, or the dishonesty of the manufacturer, but is, in most cases, more probably, the result of the mode of preparation. The trouble seems to lie with those drugs whose medicinal effect depends on volatile principles, which would be evolved on application of even a low degree of heat.

Here, then, is the difficulty that the use of heat renders the extract valueless, because it deprives it of its only valuable ingredient. To dispense with this dangerous agent is the effort of every manufacturer.

Different makers have adopted different methods, involv-

ing the use, however, of more or less heat, but none have achieved the result desired, till Dr. Samuel P. Duffield, of Detroit, announced his process, in which he avoids the use of any heat whatever. The following is a short description of this valuable improvement:

"The drug is ground to a coarse powder and placed dry in an iron cylinder. The air is then exhausted by means of an air pump, causing the pores of the drug to give up the air contained in them, and permit the entrance of the menstruum, which is forcibly sucked in through a syphon tube. The effect of this is to impregnate the menstruum with the entire soluble and medicinal properties of the drug, and thus rendering after concentration with the aid of heat unnecessary."

Many of our leading physicians, among whom we might mention Professor Weber and Scott, of Cleveland, Professor Armor, formerly of the Michigan University, Professor Hildreth, of Chicago, have tried fluid extracts made according to Dr. Duffield's process, by Duffield, Parke & Co., of Detroit, with a view to thoroughly test the merits, and have pronounced them decidedly superior to others in use.

In general appearance they differ much from the dark colored preparations to which we are accustomed. The standard is that of the U. S. Pharmacopœia, sixteen troy ounces of the drug to the fluid pint.

LOOT.

"Milk for Babes."

Dr. Tracy, of Andover, Mass., writes thus of "Milk for Babes," to the Boston *Journal of Chemistry:*

"Writers generally speak as if all cows' milk was equally good, or nearly so, for babes. I wish to say that, about twelve or thirteen years ago, I was led to notice that cows' milk which retained its color after the cream had been taken off,

would sit well upon the stomach; while that which was either bluish or greenish after the cream was taken off, would uniformly disagree. For the last dozen years, I have not met with a single instance where an infant has failed to be well nourished, and to flourish well, upon such milk as first mentioned; nor have I met with a single instance where one fed upon such as last named, did not suffer from colic, green dejections, and general ill health. The rule is, the less change of color between the new milk and the same milk after standing twelve hours and having the cream removed, the better the milk for infants; and, on the contrary, the greater the change of color, the more unsuitable for their purpose. This is an item that I have never seen noticed by any writer, excepting by the author of '*The Mother and her Offspring.*' No analysis is necessary to indicate to mothers the kind of milk their children require. The color after the removal of the cream, will indicate its positive or relative fitness or unfitness for children's food."

Germain to the same subject, Mr. Horsley, analyst to the county of Gloucester, in a paper on the subject, *Chemical News*, says that a milk may be of high density, and yet give but comparatively little animal matter, such as cream and caseine, whilst the amount of lactine retained in solution in the whey may be greater than usual. On the other hand, a sample of milk may be of lower density, and yet yield far more animal matter than ordinary, though each may be perfectly genuine; the difference in the relative value of the constituents depending much on the time of year, the mode of keeping and feeding the cow, etc. He found only one degree of difference between a sample purchased at Cheltenham and a sample supplied to the workhouse; but an analysis of the two specimens shows not only a vast difference in the amount of solid matter, but also that very little reliance can be placed in any of the instruments usually employed in determining the value of milk; for the fatty matter of the milk, unlike any other aqueous solution, helps to keep up the instrument, and gives no idea of the actual density of the sample, nor of its value.

In the cases of infantile intestinal trouble, where *good* milk fails to agree, much advantage will be gained by adding to it a few grains of the *Phosphate of Soda.* It is vastly better than the old-fashioned plan of giving *Hyd. cu. Cret.* every time the infantile "bowels are out of order." This is an old

remedy for this sort of trouble, and a very good one; and we are happy to see Dr. Stephenson, of Edinburgh, recalling attention to it. He says:

"In infants who are being artificially reared, and who are liable to frequent derangement of the bowels; also, when the phosphatic elements in the food seem deficient, or when articles of food rich in phosphates, such as oat-meal, disagree; where, from the character of the motions, there is a deficient or defective secretion of bile. It is thus of service in cases of chalky stools, or white fluid motions. I have also found it of service in many cases of green-stools. In diarrhœa, generally, it is more difficult to distinguish the class of cases. In simple diarrhœa, such as we frequently meet with in the summer months, I have not found it of much service alone, although it may be of use when given in combination with other remedies. It is chiefly in that class of cases which are more properly termed duodenal dyspepsia, that it is of benefit. Diarrhœa after weaning is generally of this nature, and the cases are often chronic, or of some weeks' standing; the mother generally having exhausted her own and the nearest druggist's resources, before applying for advice. It is also of service in some cases where the diarrhœa is due to some general cachexia."

He also uses it with adults in some cases of constipation, and in cases of duodenal dyspepsia. He likens its action in phthisis to that of the hypophosphites of soda. The dose for children is four to ten grains, in the food; for adults, twenty to forty grains, in water, and taken after meals. Too small doses fail of their action.

Decolorizing Tinct. Iodine.

Some time since, we gave in the JOURNAL a formula for decolorizing *Tinct. Iodine*, by the addition of a few drops of *Carbolic acid*—giving a solution of "*Carbolate of Iodine.*" Dr. Baruch, of S. C., writes to the *Medical Record* that sometimes this may be contra-indicated. In such cases, he observes:

"I have ascertained that the *Hyposulphite of soda* has the peculiar effect of depriving the *Iodine* of its color, forming a perfectly limpid fluid, which does not form the purple *Iodide of starch* on the linen, nor produce a yellow discoloration of

the skin. The *Hyposulphite* having no medicinal effect in the small quantity required for this purpose, the *Tr. iodine* suffers no addition to nor detraction from its therapeutic properties. I make a saturated solution of the *Hyposulphite* in water, and this is added in proportion of about one-sixth of the *Tr. Iodine.* The latter floats upon the former; but, through agitation, will produce a beautifully clear solution with the properties mentioned. The solution of the *Bisulphite* answers the same purpose. If we desire to obtain the effect of the undiluted *Tr. iodine*, we need only dissolve a few small crystals of the *Hyposulphite*, or a little of the powder of the *Bisulphite*, in the tincture, and complete decoloration will be the result.

Among the varied uses to which *Carbolic acid* is being put, Dr. Waring commends its addition to zinc ointment, in badly smelling sores, cancer, etc. Five grains to the ounce of zinc ointment, is recommended as a local application to fœtid feet and armpits.

Treatment of Venereal Diseases in Paris.

Dr. Yandell, writing from Paris to the *Nashville Journal*, says that in the *Hospital du Midi* they insist on puncturing buboes perpendicularly, and not horizontally; the contraction of the skin thus keeping the incision open. All sorts of chancres are treated by frequent applications of *Lunar caustic*, and dressings of aromatic wine or aromatic vinegar. In Paris, as in London, "a bewildering contrariety of opinion" exists as to the varieties or identities of syphilis; and many even contend that syphilis sometimes results from a blenorrhœa. Circumcision is resorted to, whenever any excuse is afforded — prominently as "security for the future," after a very French fashion.

Cubebs and *Copaiba* maintain their pristine ascendancy in the treatment of blenorrhagia, to such an extent that many patients prefer to submit to the disease rather than suffer the nauseous remedy. It is scarcely probable that in the treatment of venereal diseases, "they do these things better in France" than in this country. In fact, no man can transplant the details of French therapeutics to this country, and succeed in practice. The best part of their therapeutics is their cookery,

which Dr. Y. strongly commends; incidentally observing, "Bad cooking, I am convinced, killed more Confederate soldiers than were killed by the Yankees." The millenium can not come, of course, until sin ceases in the world; but sin can never disappear, while the brains and nerves of men are tortured by unwholesome blood, the result of bad cooking; and so I conclude that the man who improves the cookery of his country, is one of its true benefactors — certainly the peer of him who makes 'two blades of grass to grow where one grew before.'" All of which, we steadfastly believe.

Preserving Anatomical Specimens.

The *Journal de Pharmacie et de Chirurgie* records the process of M. Van Vetter, of the Anatomical Museum of the University of Boulogne, in preserving anatomical specimens:

He takes seven parts of glycerine, one part of brown sugar, and half a part of *Nitre*, and mixes them. The pieces to be preserved are placed in this, and allowed to remain until hard as wood. The time depends upon their size — a hand requiring eight days. They are then suspended in a dry, warm apartment. The glycerine soon evaporates, leaving the specimens soft and supple, and with their natural color. The action and mechanism of the muscles may be demonstrated from specimens thus prepared.

Cannabis Indica

Is again spoken of in the treatment of delirium tremens.

AMERICAN MEDICAL ASSOCIATION.

Office of Permanent Secretary, Wm. B. Atkinson, M.D., *S. W. Cor. Broad and Pine Sts., Philadelphia.*

The Nineteenth Annual Meeting of the American Medical Association will be held in Washington, on Tuesday, May 5th, 1868, at 11 o'clock A.M.

The following committees are expected to report:

On Ophthalmology, Dr. J. S. Hildreth, Illinois, Chairman.

On Cultivation of the Cinchona Tree, Dr. J. M. Toner, D. C., Chairman.

On Surgical Diseases of Women, Dr. Theophilus Parvin, Ind., Chairman.

On Rank of Medical Men in the Navy, Dr. N. S. Davis, Ill., Chairman.

On Insanity, Dr. C. A. Lee, N. Y., Chairman.

On American Medical Necrology, Dr. C. C. Cox, Md., Chairman.

On Leakage of Gas Pipes, Dr. J. C. Draper, N. Y., Chairman.

On Medical Ethics, ——— ———, Chairman.

On Plan of Organization, Dr. C. C. Cox, Md., Chairman.

On Provision for the Insane, Dr. C. A. Lee, N. Y., Chairman.

On the Climatology and Epidemics of Maine, Dr. J. C. Weston; of New Hampshire, Dr. P. A. Stackpole; Vermont, Dr. Henry Janes; Massachusetts, Dr. Alfred C. Garrett; Rhode Island, Dr. C. W. Parsons; Connecticut, Dr. E. K. Hunt; New York, Dr. W. F. Thoms; New Jersey, Dr. Ezra M. Hunt; Pennsylvania, Dr. D. F. Condie; Maryland, Dr. O. S. Mahon; Georgia, Dr. Juriah Harriss; Missouri, Dr. Geo. Engelman; Alabama, Dr. R. Miller; Texas, Dr. T. J. Heard; Illinois, Dr. R. C. Hamill; Indiana, Dr. J. F. Hibbard; District of Columbia, Dr. T. Antisell; Iowa, Dr. J. W. H. Baker; Michigan, Dr. Abm. Sager; Ohio, Dr. J. W. Russell; California, Dr. F. W. Hatch; Tennessee, Dr. Joseph Jones; West Virginia; Dr. E. A. Hildreth; Minnesota, Dr. Samuel Willey.

On Clinical Thermometry in Diphtheria, Dr. Jos. G. Richardson, N. Y., Chairman.

On the Treatment of Disease by Atomized Substances, Dr. A. G. Field, Iowa, Chairman.

On the Ligation of Arteries, Dr. Benj. Howard, N. Y., Chairman.

On the Treatment of Club-Foot without Tenotomy, Dr. L. A. Sayre, N. Y., Chairman.

On the Radical Cure of Hernia, Dr. G. C. Blackman, Ohio, Chairman.

On Operations for Hare-Lip, Dr. Hammer, Mo., Chairman.

On Errors and Diagnosis in Abdominal Tumors, Dr. G. C. E. Weber, Ohio, Chairman.

On Prize Essays, Dr. Chas. Woodward, Ohio, Chairman.

On Medical Education, Dr. A. B. Palmer, Mich., Chairman.

On Medical Literature, Dr. G. Mendenhall, Ohio, Chairman. Secretaries of all medical organizations are requested to forward lists of their Delegates as soon as elected, to the Permanent Secretary. W. B. ATKINSON.

Receipts since Jan. 1.

The following is a list of persons from whom money has been received at this office for the JOURNAL, together with the amount paid by each, since the beginning of the current year :

Annis, T E, $2; Armstrong, J M, 6; Albin, G W, 3; Armstrong, J S, 2; Arter, J R, 2; Allen, C C, 3; Amos, E, 3; Armstrong, L G, 3; Armstrong, W G, 10; Adams, H D, 3; Andrews, L M, 4.50; Allen, C I, 3; Adams, O B, 3; Anthony, J P, 3.

Barr, J A, 2; Broughton, R, 2.25; Barnwell, J H, 5; Bosco, O H, 2; Bradbury, W T, 5; Boole, T N, 3; Blood, S, 2; Berchelman, A, 3; Barkett, B, 2; Burner, S A, 6; Bingham, E H, 3; Bates, J H, 2; Bacon, A J, 3; Boening, L, 3; Booth, 3; Brigham, J W, 3; Brookhart, L, 5; Baker, J H, 2; Bailey, W W, 2; Barnett, J R, 2; Baldwin, M O, 4.50; Brown, L, 2; Bennett, J, 3; Boardman, J G, 3.50; Blanchard, J G, 3; Brown, J Z, 4.50; Boardman, E R, 3; Bradshaw, B H, 6; Barnes, R A, 3; Baker, B, 3; Bayles, E W, 3; Bailey, F K, 3; Brown, J, 5.

Corkins, P G, 6; Cosad, J, 3; Coover, W H, 3; Covert, G W, 2; Cory, J B, 3; Cusack, J H, 5; Clark, S, 3; Cowden, J W, 2; Chase, H A, 2; Crosswait, P R, 3; Cook, J A, 2; Crane, W H, .75; Clark, W W, 3; Cole, F, 3; Campbell, J W, 2; Clark, J A, 3; Chesbrough, H F, 3; Comstock, T G, 3; Cargen, W, 2; Cook, E P, 3; Clark, H N, 3; Carlisle, C H, 2.20; Cloud, J B, 3; Cole & Crosswait, 3; Condon & McClelland, .75; Clark, Ossian, 6.

Drake, J T, 4; Dunn, J W, 3; Dietrich, T A, 3; Durr, J A, 10; Davidson, D L, 2; Davis, B F, 3; Dora, J W, 3; Dunn, A A, 3; Drummond & Bower, 1; Douglas, A C, 3; Drake, N A, 2; Dyer, L, 3; Danforth, I N, 3; Dant, J R, 5.

Elhardt, F, 2; Elder, T A, 2; Egbert, J B, 6; Ellis, D E, 3.

Fawcett, H B, 4; Felker, J B, 6; Flynn, W, 2; Fisk, G, 2; Fenton, S C, 3; Foster, J H, 3; Fenn, C T, 3; Fish, S N, 3; Fifield, F, 2; Flood, J R, 3; Ford, C L, 3.

Gibbs, J A M, 2; Gill, C J, 3; Gibson, A C, 2; Galloway, S, 3; Gray, J D, 6; Grattan, E H, 3; Griffith, J H, 3; Goldsbury, J A, 3; Gandy, J L, 3; Goodell, J H, 1.50; Glassner, E T, 6; Garven, 5; Gray, S C, 7; Galer, J B, 5; Green, J S, 3.

Heavenridge, A, 3; Hughes, M, 2; Horton, H E, 3; Hall, R W, 3; Hoffman, J E, 2; Hollingsworth, 5; Hain, W F, 2; Haskell, A S, 3; Hagey, W H, 2; Herdman, J W, 3; Holland, A, 1.25; Hutchins, J H, 2; Hodge, A, 1; Hutchings, 4; Hagelisen, 3; Hobbins, J H, 6; Hulburt, V L, 3; Haggard, J R, 2; Hart, H W, 3; Hayes, J, 3; Halt, C E, 3; Hopkins, R, 3; Herman, P J, 3; Hunt, T, 6; Hoss, J V, 3; Hunt, J, 3; Henry, A F, 3; Haladay, A, 3.

Irwin, E H, 3; Ireland, A B, 3.

James, O, 2; Johnston, Thomas, 3; Jones, J R, 3; Johnson, C J, 5.50.

Kelsey, W J, 3; Kirkpatrick, G W, 5; Kimball, 3; Kelper, G F, 3; Kinnear, A H, 3; Knowles, J, 3; Kennicott, 3; Knox, W A, 3; Keigan, C J, 3; Kennedy & Moor, 10; Kyner, D J, 6.

Lyman, M J, 3; Love, H, 6; Lueck, A W, 3; Latta, M M, 6; Lewis, J B W, 3; Little, J, 1; Leffingwell, J W, 3; Leavitt, J J, 2; Layne, P M, 4; Long, S O, 3; Leonard, W R, 2; Low, J, 3; Law, W, 6.

Mowrer, P A, 4.50; Morrow, G M, 2; May, W L, 5; McCleary, 5; Mead, A J, 3; Maloney, J M, 2; Mahon, 7; Miller, J W, 6, Mansen, W, 2; Middleditch, A, 3; Messner, L C, 2; Murphy, S C, 3; Montgomery, D B, 2; Marshall, E B, 2; McKune, A B, 2; Marshall, W R, 3; Miller, A, 2; Moffitt, J, 2; McCulloch, A P, 2; McCaughey, T C, 2; Mayo, E L, 2; Moore, E L, 3; McClure, A W, 3; Meek, J A, 6; Miller, A J, 3; Morse, W A, 3; Monroe, H, 3; Mergler, 3; McFarland, P M, 1; McKnight, W, 3; Molony, R S, 6; Martin, F E, 2; Moore, A V, 2; Mallett, 6.50; May, J K, 6; Montgomery, D B, 1; Murphy, Thomas, 2.

Newkirk, G, 2; Nelson, A P, 6.

O'Brien, J H, 5.

Patton, W R, 2; Parks, T H, 3; Pankhurst, 2; Pierce, R W, 5; Peters, J H, 2; Plummer, S C, 6; Pratt, A S, 6; Patton, W K, 3; Porter, W B, 3; Price, W H, 3; Perry, J W, 3; Prentice, J, 3.

Ray, R B, 6; Ross, B F, 6; Rea, D, 3; Riddler, J G, 5; Reed, C B, 2.50; Rankin, J M, 1.50; Redmon, L, 3; Rush, B H, 3; Reed, R, 2; Robinson, J. H. 10; Riddle, H R, 2; Rusell, E F, 3; Robinson, S E, 3; Rodman, A J, 6; Rich, K E, 3.

Sweetland, W M, 3; Salisbury, S S, 3.50; Sigworth, H W, 3; Somers, W, 3; Smith, A E, 3; Sims, J, 5; Sprague, C C, 3; Smith, C H, 3; Stevens, D R, 3; Smith, W H H, 2; Simpson, J, 2; Searles, J, 1; Skeer, J D, 3; Snyder, J D, 3; Spitler, E, 2; Seely, O F, 2; Saucerman, J M, 3; Silverthorn, L L, 5; Sherman, N, 3; Sullivan, W H, 5; Smith. H W. 1; Smith, M F, 3.

Trueworthy, J W, 2; Tuttle, J V, 3; Thayer, J W, 3; True, B F, 3; Trabue, J W, 3; Tebo, G H, 3; Taylor, G O, 2; Thompson, D D, 2; Tucker, B B, 3; Thurman, J B, 3; Towne & Brett, 3; Tucker, J B, 3.

Vosburg, D M, .75; Van Nus, J S M C, 3; Van Meter, H, 3.

Williams, J D, 2; Whittlesey, S H, 2; Waterhouse, M, 5; Webster, J R, 3; Worsley, G, 3; Walsten, R L, 3; Wheaton, 2; Winson, J, 3.25; Warner, H, 3; Witherspoon, M V B, 1.25; Williams, J A, 3; Webster, J C, 2; Woodworth, L C, 3; Wetmore, R B, 3; Wood, T F, 1.50; Webster, B M, 2; Wheeler, E N, 2; Wilson, W T, 3; Woodman, E, 2.

Yount, T J, 2.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—MAY 1, 1868.—*No.* 9.

PROGRESSIVE PARALYSIS OF THE INSANE.

(PARALYSIE GÉNÉRALE DES ALIÉNÉS, OF THE FRENCH.)

BY A. W. BOSWORTH, M.A., PARIS, FRANCE.

Thesis for the Degree of M.D., Presented to the Faculty of the Rush Medical College, Chicago.

OF cerebral diseases, this is one of the most important, most common, and, in regard to its symptoms, march, termination and pathological anatomy, one of the best characterized.

Although asylums contain a large number of this class of patients, and notwithstanding it has been described as a distinct disease for the last forty-five years, yet to-day we see many practitioners unacquainted with it, unless they have followed a special service in some large town.

Not being able, in an ordinary thesis, to dwell on its history, we can only briefly mention some of the different ways in which it has been mentioned by the principal authors.

Esquirol, 1805, remarked the incurability of insanity, when complicated with palsy. In 1844, in his article on Dementia, he considered the palsy as a complication of insanity, and not as a distinct affection.

Bayle, 1822, was the first to admit that the intellectual derangement and the palsy marched simultaneously; and con-

sidering the disease due to chronic inflammation of the arachnoid, he styled it "Chronic Arachnitis," and divided it into three periods: 1st, Congestion, ambitious monomania, with incomplete palsy. 2d, Mania, inflammation of the meninges. 3d, Dementia, the general palsy being more salient, due to serous exudation.

Georget regarded palsy as consecutive to insanity.

Calmeil, 1820, gave a complete description of the disease, and asserted that the principal anatomical lesion was not an inflammation of the meninges, with its reaction on the cortical substance of the brain, but an inflammation of the cortical part itself; that the palsy was not owing to compression produced by the serous effusion on the brain, but to the disorganization of the gray substance.

Parchappe, 1838, gives the softening of the cortical part as pathognomonic of the disease, dementia paralytica—folie paralytique—having for its essential character the simultaneous lesion of movement and of intelligence.

Baillarger, 1846, endeavored to prove that the lesion of movement, and especially of speech, precedes the symptoms of delirium. He considers the disease neither as a complication of dementia, nor a particular form of mental alienation; but as a special and independent malady, especially characterized by lesion of the movements, which may be complicated with secondary mental alienation, or may exist alone.

M. Marcet, 1862, regards the disease as being constituted by four distinct associated elements, viz.: 1st, Disorder of motility. 2d, Intellectual weakness. 3d, Delirium, characterized, in the majority of cases, by exaltation and ambitious ideas. 4th, As a constant organic lesion, the adhesion of the meninges to the cortical layer of the circumvolutions.

Mr. Fabret, junior, gives the following conclusions: 1st, Dementia paralytica is distinct from all other general palsies. 2nd, General palsy does not occur among the insane who have been a long time in asylums; it is of another nature, and depends on another disease; ex., softening of the brain, apoplexy, cerebral tumor. 3d, The insane, who die paralytic in

asylums, already presented symptoms of palsy on entering, or soon after; and, in every case, died within three or four years after admission.

Some authors admit two distinct kinds: 1st, General palsy, with insanity. 2d, General palsy, without insanity.

It is this last form, which all authors do not admit. The two forms have been confounded by some, under the name of General Progressive Palsy. As a distinction between the two, the first is considered incurable; the second, less dangerous, and often cured. This distinction is contested, as all authors do not admit the latter form. Most authors, however, agree that the disease is incurable, and believe that the examples given as recoveries are only remissions.

This malady being frequent, serious, incurable, attacking especially man, and, when in the bloom of life, conducting him through sad stages of degradation to an untimely grave, has caused me to wish to study it, and to here use it as my theme; not expecting, however, to be able to advance the knowledge of the profession thereby.

It is anatomically distinguished by chronic congestion of the cortical substance, and adhesion of the meninges. Its symptoms are: disorder of motility, dementia, and delirium, often of an ambitious tendency.

It is of great importance to be able to establish the first indications of this disease, not only in a medico-legal point of view, but for the reputation of the physician, who, if he does not recognize the insidious beginning, will have the mortification of seeing his reputation compromised; and also for the patient, who, if left unguided, may soon be dangerous—hazarding life, fortune, and the honor of himself and his fellow beings.

As precursory symptoms, many months before its invasion, arrive light cerebral congestions, which cause redness of the face, trouble of vision, heaviness of the head. An intense redness, some times with pain, has been noticed to occupy one or both ears. These symptoms are characterized by their short duration, and may return after each meal, or between

them, at irregular hours of the day and night. Before, during or after the congestion, there may be more or less cephalalgia, with epistaxis. At the same time, appear a particular disposition of the mind, changement of character and manners, which can not be accounted for by friends. There is a perversion of the moral faculties, no longer harmoniously performing their functions; persons or things heretofore cherished by the patient, become, for the moment, completely of no account; at one time, he is seen contradicting all, then again acquiescing in every respect; in a short time, sustaining, with the same obstinacy, contradictory opinions. In three-fourths of the cases, irritability is intensified; movements of impatience, anger, and violence, may be observed from the slightest cause. On the contrary, some times remarkable placidity is evident; disgust for serious occupations; apathy for amusement; or, the patient, while yet attending to his daily vocations with customary assiduity, although of honorable, pure, religious habits heretofore, may now commit indelicate, scandalous acts of dishonesty and debauchery.

As the period of incubation is so insidious, all that concerns the moral condition of the patient, should especially demand the physician's attention. As a great many persons predisposed to mental disease, frequently manifest strange peculiarities, if they are carefully examined, we find characteristics of noted opposition, inconsistent with age and education. Some are gay, eccentric, running to and fro for every mundane joy; others are reserved, melancholic, secluded, shedding involuntary tears, succeeded some times by bursts of gaiety—soon, however, to be sadly deplored. With some, vanity or humility, timidity or boldness, want of order, in even the most trifling affairs; scrupulous, some times, to an excessive degree, or presenting stolid indifference. Often vacillating, their affections, desires, dislikes, degenerate into ardent passions, causing them to pass rapidly from enthusiasm to discouragement, or *vice versa*.

While friends are now being perplexed, not perceiving the true nature of conduct to them inexplicable, the precursory

period, short or long — after M. Brierre de Boisimont being able to continue six or seven years — intensifying passes into the

First Stage.

Although the precursors of this period are sufficiently uniform, yet when the disease is at its present stage it is so variable that with reason do we think, Messrs. Jules Favre, Limas, Marcé, etc., are well authorized in admitting four distinct varieties; in two of which, the paralytical and congestive forms, predominate physical symptoms; in the other two, the expansive and melancholic, are clearly evident psychical symptoms.

Expansive Form.—This is considered the most common. After a precursory period of various duration, the patient, now irritable and violent, becomes more active than is usual. Proud, enterprising, not finding enough in his profession to satisfy his devouring activity, he exaggerates it, or undertakes several vocations at the same time, pushing them to a colossal degree; but, as has been truly remarked, this activity is soon only sustained by words. All his numerous projects rest at a mere beginning. His ambitious ideas are not only absurd, but contradictory. His acts are often singular, droll, dangerous, or even criminal. We now see that his memory and reasoning faculties are weakened. He forgets what he has done or intended to do a few hours before; strongly declares that he has not eaten for a day or two, when but a few hours preceding he ate a hearty meal. With this forgetfulness of the present, it is not uncommon to see coincide a perfect remembrance of facts that occurred years ago. His mind may yet retain brilliant parts, but generally it takes the wrong direction. Surrounding persons see that his intelligence has diminished; the mind has no longer its ordinary firmness and precision, but there are deficiencies, reveries, forgetfulness, causing the patient to get confused in a conversation a little prolonged; he can no longer explain a subject, or an important fact, with his heretofore customary clearness, losing himself either in the details or in the conclusions.

Symptoms of organic excitation are not less accentuated. With inability to remain motionless, they are obliged to yield, and are seen walking, running, leaving their abodes, and roaming through the streets or fields, undressing themselves and lying down in the open air. Now impelled to mental and physical activity, they are rendered bold, never doubting to fail in an undertaking. Even the most avaricious rush headlong into the most hazardous speculations; embellish their houses without having money to pay; make numerous presents; in every way profusely spend, and far surpass their incomes or resources. With this irregularity are seen various excesses, such as being given to alcoholic drink, which certainly aggravates their sad condition; an erotic passion, becoming so unsatiable that they pass all bounds to gratify it; thieving in a peculiar manner, apparently without design. The malady advancing now brings to the observer all the symptoms of true maniacal delirium of an ambitious nature, which pertain to making of himself an *Ego*. His contradictions are not revolting to him; he does not strive to reconcile or prove the ideas advanced; he relates, at the same moment, his real and his imaginary life, without endeavoring to make them co-ordinate. He sees no bounds to his ambition; he is at once pope, emperor, king, or president of a state; he has numerous servants, houses, castles, treasure without end; they cause to descend on the persons about them, on the physician himself, dignities of all grades; it costs them nothing to make promises and to offer services. Sometimes they consider themselves supernatural, God himself, and heal the sick; make the blind to see, the lame to walk; create men of prodigious size. They can cause to die and resuscitate whom they choose; they make balloons the size of a large town; they have measured the sea, the surface of the earth; give feasts to thousands of persons at the same time.

Sometimes it is a mania for marriage; they are going to espouse princesses, queens; forget their own wives and children; the sun, moon, and the stars converse with them; *they* are not fools, and ask consultations from the doctor; the phy-

sician who treats them is the one insane, and they mock him to his face, and pity him, or consider him their enemy.

Their attacks of Erotomania are exaggerated to the same degree, and often lead them astray. There is another class of patients who, though not presenting this train of ambitious ideas, and not having, properly speaking, delirious conceptions, yet live in a state of happiness, supremely contented with themselves. They have pretensions to literature, poetry, strength. They think themselves vigorous, never in better health. They admire themselves, and endeavor to have others admire the beauty of their person. They spend hours in arranging their clothes properly. With a frequent smile on their face, they approach the first comer with marked cordiality, and desire to show all they possess. As the disease advances, their happiness presents a strange contrast with the physical and intellectual degradation in which they are, and without moral suffering they pass happily to the embrace of death. The ambitious monomania of paralytics is easily distinguished from ordinary ambitious monomania. This last is rare; its victim is morose and taciturn at the beginning; perceives that he is ill, fears for his reason; endeavors to repel, at first, the delirious ideas, which he considers absurd. Later, mastered by the delirium, he is in harmony with his thoughts; he assumes the position, manner, gesture, voice, of the personage he has chosen. His discourse, usually the same, is consistent with the position he believes himself designated to fulfill. General, king, or prophet, he only uses terms coinciding with his illusory dignity; majestic and dignified, he remains taciturn, not taking the first person seen for a confidant, but retains all to himself. His delirium is fixed, unchanging, and he gives proofs of a greater or less value of what he asserts. Hallucinations, rare with the paralytic, on the contrary are with him frequent.

Far different from the preceding is the petulance and stupid haughtiness of the paralytic, which changes at every instant, characterizing itself by the particular nature of the ambitious ideas, which are multiplied, absurd, and contradictory. We

easily see with them that memory and reason are profoundly affected. To-day king or emperor, to-morrow pope or Divine Creator, showing no tenacity for their opinions, yielding them if contradicted; ideas as heterogeneous as the products of a volcanic eruption; laughing or crying at the same moment. Their weeping singularly presents itself; while so doing the face is pale. They regard those who surround them, not endeavoring to conceal their tears, every indication of intelligence disappearing from their countenance; we perceive that they are not conscious of their actions.

Only the idiot and the cretin thus weep.

At the same time as this excitation, intellectual weakness, and ambitious ideas are manifested, we observe trouble of motility and of sensibility, *i. e.*, difficulty of articulating sounds, cutaneous anæsthesia and inequality of the pupils.

Imperfect Articulation.—This arises from an irregular, convulsive contraction of the lingual, labial, and facial muscles, producing at the beginning a slight, transitory trembling of the tongue, occurring perhaps at long intervals for certain words or letters, as the letter R. Even before the patient has pronounced a word, as he opens his mouth to speak, may be observed a characteristic trembling of the orbicularis oris, and of the levatores labii superioris proprii, with even an oscillation of the lower jaw; and then with hesitation and difficulty the first syllable is pronounced. This impediment in speech presents different degrees; at the first it is difficult to be recognized; the speaking is less distinct. The patient speaks with a difficulty, evident to the physician by the trembling of the lips, by hesitation, by a false endeavor seized only by an experienced ear; or his words may be blunt, precipitated, appearing strongly guttural. At a more advanced period exists stammering, which is pathognomonic of the disease. Now by causing the poor creature to extend the tongue, we perceive its peculiar trembling, he not being able to retain its immobility for a moment. After meals, during periods of anger, with some, difficulty of speech is more evident; with

others, during periods of excitation it is less marked, and only is remarkably apparent during their moments of depression. This characteristic of the disease being so variable, the physician must choose his moments of examination, and possibly will be obliged to make his patient speak several minutes, or read some difficult passage, before he will manifest this keystone to his disease.

At a more advanced period still, with some are observed continual movements of deglutition, noise of the dental arcades coming in contact during mastication, continual or interrupted grinding of the teeth at different hours of the day.

The Inequality of the Pupils, first recognized by M. Baillarger, may appear at the beginning of the disease, and at the period when the victims have arrived in the hospital, usually is easily perceived. Like other symptoms, this, at moments, is observable, and then disappears only to return at intervals more or less long. For its explanation we can here merely say that it may be found explained by M. Baillarger in the "Gazette of the Hospitals," of Paris, May 14th, 1850.

Evident it is that the idea of diagnosticating the kind of paralytical delirium by the dilatation of the pupils is not yet established. After M. Mareau (Paris, 1853), who has seen the pupillar inequality in more than half of the cases, there is an abnormal convexity of the eye; the sclerotic is bluish; the eyebrows are curiously arranged, being in more than fifty cases in a hundred, elevated on the forehead, or falling over the eyes after the manner of the hair of the upper lip.

Lesions of Motility are not less interesting to be studied in other parts of the body, especially of the inferior and superior members. M. Tardieu especially notices the alterations of motility in the superior members. Other authorities have asserted that the palsy attacked firstly the arms, then the legs; yet observation does not prove their assertions, but tends to prove that both extremities are simultaneously seized.

Formications and prickling sensations are felt in the members during the first accidents. Often it is only a simple, nocturnal weakness; fatigue, which sleep and repose do not calm.

The patients are abnormally active, being able at moments to exert great muscular energy, but their gait is heavy; they make false steps; they appear to be propelled onwards by the weight of their own body, and not apparently stopping more easily than does the momentum of an inert body. The muscular weakness, the trembling and non-coördination of movement of the thoracic members may be observed at the beginning of the disease, by causing the patient to extend his arm and hand — then is trembling evident; by giving him a glass of water to hold; by causing him to thread a needle, or to write a few words. The characteristic writing has been mentioned by various authors.

Melancholical Variety.—Many authors have noticed this disease to take a sorrowful form, thus remaining for a shorter or a longer period of time. The patients believe themselves dishonored, ruined; think that they have committed crimes, and are being pursued by justice, that they are destined to be imprisoned, hung, or decapitated. With them melancholia may attain a stupid state; they remain incapable of acting; dumb, not moving, refusing food; falling when raised, and believing it impossible for them to walk. During their sadness, when most lamenting, sometimes may be noticed ideas of grandeur, ambition, which truly are of importance as clearly evincing the disease.

With this melancholical delirium, a special hypochondriacal state of the mind may sometimes be seen. After M. Baillarger, in three fourths of the cases there is a special hypochondriacal delirium. This latter is recognized by the patient believing that his organs are changed or destroyed. They think they no longer have a mouth, or stomach; no more blood; their intestines are full; their food passes under their skin, into their clothes; their body is in a state of putrefaction; can no longer urinate, or go to the *garde-robe;* can not open their eyes, because they are blind. Some believe themselves dead, rest immovable, refusing food, and thus are obliged to be nourished with a tube. We should, however, remember that

the above symptoms are only of great value in point of diagnosis when they are associated with trouble of motility, with inequality of the pupils, difficulty in the pronunciation, which may present themselves with various degrees of accentuation. We must not forget to obtain, if possible, the antecedents of the patient, by which will almost invariably be found a weakness of the memory that has preceded the above symptoms for several months.

M. Baillarger has remarked that general palsy rapidly marches with these patients, and that there is great tendency to gangrene of the tissues, and an adynamic state promptly mortal; yet observation proves that often the melancholic or hypochondriacal state, as well as stupidity and an inclination to suicide, may be prolonged for months.

M. Moreau, (of Tours) in 1860 declared, at the Imperial Academy of Medicine of Paris, that the hypochondriacal delirium could not be considered as a precursor of general palsy; that when it appears, the palsy has usually been affirmed or announced by other symptoms. On this point there is a difference of opinion. M. Moreau also declared that there exists between the special delirium and general palsy affinities, very intimate, if not necessary; that the special delirium borrows its semeiological value from a morbid state more general, and influencing more profoundly the organism; that this state is a general depression, the slow and progressive annihilation of the vital powers, observable among all paralytics; that the special, hypochondriacal delire, and certain other analogous forms of delirium differ in this respect; the first taking its origin from abnormal sensations, real but disfigured, transformed by a troubled intelligence; the second being the result of a morbid working of the mind, and of delirious preoccupations.

Paralytical Form.—The absence of delirious conceptions, and the predominance of the troubles of motility, characterize the disease. When assuming this form, M. Parchappe (page 144), who published forty-three observations, gives the following conclusions: "We may conclude that the ideas of gran-

deur, riches, power, exaggeration, far from being characteristic of delirium which accompanies palsy, are only found in one case in four." In another place the same author contradicts himself by saying, "General palsy is a complication of madness; a new element which associates itself with the intellectual disorders, or else a peculiar form of mental alienation. Paralytics are, above all, insane, the principal phenomenon being insanity."

Messrs. Baillarger and Prus say, "General palsy exists in a great many cases without insanity, and that then the patients die in their families, not having gone to the asylum, and thus escape observation." Trousseau, Ducheme (de Boulogne), Requin, Delaye, Grisolle, etc., admit that the disease may occur without alienation.

Messrs. Brierre (of Boismont), Marcé and Fabret contest this opinion.

Esquirol, 1816, and Georget, 1821, considered general palsy as a complication of insanity.

We will briefly mention some of the symptoms noticed in this variety. The patients themselves are conscious that their movements are gradually losing their regularity and force; that while walking they easily tremble, and are quickly fatigued. The habitual precision of the arm and hand being impaired, they find themselves unable to play the piano, sew or write. At the same time the lingual and facial muscles present their characteristic trembling, pronunciation thus becoming difficult; the pupils become unequal, and all the motility of the system is more or less affected.

If the physician is often permitted for some time to see the patient, or the persons in daily contact give attention, they will perceive transformations of the mind; that the patient is easily irritated; at one moment is very violent, and soon after may be weeping, as it were, without cause. They are fearful, easily guided by those who surround them. Their memory, for things of recent occurrence, is weakened; their intelligence is lessened; and though not always easily perceptible, yet sometimes so manifest that the patients are conscious of it,

even should they continue for a time their various vocations. However little accentuated may at first be the mental lesions, later there can remain no possible doubt of the existence of the essential elements of general palsy; namely, diminution of intelligence and trouble of motility. Often, by careful attention, may be observed in the march of this form, even transient, ambitious ideas. This form may continue for months, or some years, slowly increasing in intensity; but, sometimes, in the space of a few hours, it may make such rapid progress as to necessitate the removal of the patient to an asylum. In some cases the delirium, instead of being maniacal, may assume the form of dementia.

Congestive Form.—Although cerebral congestion complicates all the varieties of general progressive palsy, yet, as in many cases congestions occur before other precursory accidents are sufficiently manifest to characterize the disease, this stage, for a certain class of patients, may be considered as the principal prodromic symptom. Sometimes it begins by a violent congestive attack of a convulsive or apoplectic form.

At first it is considered as an ordinary cerebral congestion; but when the first accidents of the attack have disappeared, then are seen to appear maniacal excitement and ambitious ideas. Often, however, after the congestion, reason appears to return, but the memory is left weakened, intelligence diminished, and a slight difficulty in speaking continues. These latter symptoms tend to disappear when a renewed congestion recalls them with more or less intensity. This may be repeated a greater or less number of times, and with the capillaries of the face, neck, ears, and hair injected, the patient, with more or less of the primary symptoms, passes to the second period of the disease.

Second Stage.

Whatever may have been the fears or doubts in regard to the nature of the disease with which we have been called to

combat, now the intellectual weakness and the troubles of motility are sufficiently characterized to confirm all.

The actions now have no object in view. The patients go and come; displace objects without any motive; tear their clothes; undress, getting into the first bed they find; put on one garment for another; speak much to themselves; write important letters to persons unknown to them; become inattentive as to cleanliness of their person and their clothes; do not even know their most intimate friends; declare themselves unmarried, or childless, when the contrary is true.

During their paroxysms they become quarrelsome, violent, and can exert great muscular force. The intellectual faculties being so perverted, they often perform acts of indelicacy, improbity, debauchery. During these rapidly varying derangements, we perceive traces of the same delirium which characterized the first stage, usually of an ambitious tendency; yet, not unfrequently, of a melancholic or hypochondriacal nature. The troubles of motility are also very evident. The impediment in speaking is immediately seen if an attempt is made to utter certain syllables; the trembling of the limbs, now more intense, is sometimes accompanied with such a grinding of the teeth as to be heard at a distance, and even so often occurring as to wear away a part of the enamel. The muscular contractions are now so weakened and irregular that the patient has great difficulty to walk, to aid himself. The patient, if seated, raises and lets his feet heavily fall; incomplete, continued, or alternative extension and flexion of the limbs is seen; sometimes muscular contraction is so prolonged as to produce incurvation of the head, limbs, or body.

Third, or Final Stage.

It is considered to arrive when there is an involuntary emission of the urine and fæces. At first this may occur only occasionally, but later they can retain no fœcal matter unless it be in a solid state, as the vesical and anal sphincters are paralyzed.

Although the patient may have arrived at this physical degradation, he sometimes so recuperates as to again retain for months control of the anal and vesical sphincters. The difficulty of speaking has now so far advanced as to render the patient's mutterings unintelligible, even should he make great efforts to speak distinctly. Now he remains more or less dumb, occasionally imperfectly pronouncing a word, as million, or king, sufficient to show there yet remains the primitive, special delirium. The victims trembling when on their legs, with their bodies more or less contracted, take to their beds; finally, while unable to turn themselves in bed, yet, till the last moments of their existence are they able to execute some movements with their palsied limbs, which characterizes this palsy from all others. The respiratory muscles being weakened, the degree of calorification is diminished. The disease is apyretic (Calmeil, Parchappe, etc.). The heat of the skin is not augmented unless during the short periods of congestion, more common is it to hear the patients complain of a sensation of cold, often painful in the lower extremities.

They no longer have even instinct or sentiment, and it is necessary to care for them and feed them like a child, yet their nutrition and assimilation go on with astonishing regularity. To our great surprise, notwithstanding their great weakness, when appearing to terminate their mortal career, they may again receive some unknown force, and live much longer than was anticipated.

As death must sooner or later triumph, so it does with this disease, and in various ways. As paralytics gluttonously eat, and their deglutition is accomplished more in a convulsive manner than otherwise, often they die by the sticking of too large a piece of food in the pharynx, or by penetration of nutritive material into the larynx. In cases of asphyxia occurring from such a cause, unless instantaneous aid is rendered, they directly perish. Death may occur from retention of urine or the too often repeated catheterism; from chronic diarrhœa; from incidental disease; from exhaustion; not being able to swallow, they become weak, and more and more

emaciated; from the suppuration of eschars produced by contact with urinary and fœcal matter; from cerebral congestion producing coma and death.

Duration.

It is of various length for each period. The precursory period, characterized by perversion of the moral and pathetic faculties, may long be unperceived. Some authors, regarding the precursors as symptoms, join them to the first period, which may thus become of very long duration. The first period, as given by Bayle, is distinguished by impediment of speech, intellectual weakness, agitation, and monomaniacal delirium.

M. Parchappe writes that some patients remain a long time in the first period, while others present almost immediately the symptoms of the second period; to-day the patient being solid on his inferior members; to-morrow, under the influence of an intercurrent congestion, he can not take a step without falling.

M. Marcé says that the first period with some is very long, and that they may rapidly fail in the second period; that others live six months or more in the midst of the most serious accidents of the third period.

The malady sometimes begins by a form designated by many authors as *Acute*. Although in some of these cases given as acute, the invasion may not have been so sudden as stated by the writers, the precursors not having been recognized; or, they may have had to do with a case as a relapse; or, the information concerning the antecedents may have been erroneously given, or misunderstood; yet this form appears to be strictly admissible. Here, as elsewhere, the fundamental symptoms are ambitious delirium, and difficulty of speech; yet with these symptoms are joined an intense fever, impossibility of retaining any thing in the stomach; great excitement from severe congestions and epileptiform convulsions; and with acute delirium some cases fatally terminate in two, three, or four weeks. In other cases, when all seems hastening to

quick dissolution, there may occur a sudden change for the better, and the affection passes into a chronic form, which is generally the common march of the disease. When the malady takes its more natural course, it is stated by Bayle to last ten months; by Calmeil, thirteen months; by M. Parchappe, twenty-three months. All authors agree in admitting that many cases have been prolonged three or four years by good hygienic and medical treatment, when the disease remained free from complication. Some exceptional cases are given with a duration of six, seven, or eight years. The principal cause of the great variation of the duration of this disease are its remissions, which have often been taken by the inexperienced for radical recovery. This suspension of bad symptoms, especially occurring during the first and second periods, must not lead the physician astray, nor cause him to brighten too much the desponding hopes of anxious friends. Let him remember that when he perceives the difficulty of speech diminishing, ambitious ideas vanishing, excitation yielding to tranquillity, weakness being supplanted by strength, that it is like the repose of a volcano preparing for another eruption; for sooner or later they will return to full, manifest possession of their victim. Usually the intellectual and physical symptoms diminish at the same time. Sometimes, however, only the mental faculties remain more or less impaired, the lesions of motility and the impediment of speech having nearly or quite disappeared. Now the patient appears well, with the exception of an occasional ambitious idea, and that his intelligence is a little impaired. He declares that he has been ill, but maintains that his reasoning powers were not dethroned, and that he no longer has need of friendly sympathy or medical treatment. With them, the experienced understanding of the well instructed physician will perceive that, in spite of their patients' assertions, their intelligence is still impaired, remains abnormal; that they are less energetic, are occupied with trifling affairs, easily influenced; without difficulty are they led by their passions or persuaded by others to excesses of various kinds.

FOREIGN CORRESPONDENCE.

To the Editor of the Chicago Medical Journal.

HEIDELBERG, March 4, 1868.

DEAR SIR:—My attention being called to ovariotomy, by your editorial of January 15th, I resolved to collect the details of a case which had been treated in the hospital of this city, and report them to you. With this object in view, I waited upon Dr. N. Friederich, professor of general and special pathology and clinical medicine in the University of Heidelberg, and requested permission to make use of the hospital records. This the professor kindly granted to me, and after a similar interview with Dr. C. Heine, acting professor of surgery *pro tem.*, I am enabled to furnish you the following report:

Magdalen Maas, *æt.* 24, farmer's wife, of Seckenheim, was admitted to the hospital Dec. 16th, 1867. According to her own statement, she had always been healthy. In her nineteenth year, her menses made their appearance, and continued to recur regularly. At the time of her marriage (last January) she was not cognizant of any undue enlargement of the abdomen. Some eight to fourteen days after, she became conscious of pregnancy, which progressed normally. Four months before her confinement she experienced pain in the left leg. This continued four weeks, and then disappeared. An extraordinary size of the abdomen was noticed by the patient, who thought herself pregnant with twins. The delivery, on the 4th of October (ten weeks before her admission to the hospital), and subsequent convalescence, were perfectly normal. The size of the abdomen was reduced considerably, though not completely. It remained distended, and attained its present dimensions four weeks ago. Lochia normal. Menses did not re-appear. Appetite good, bowels regular.

Dec. 26th.—Patient complains of pain in the lumbar regions.

Dec. 28th.—Pain in the back has discontinued.

Dec. 29th.—A thorough physical examination yields the following *status præsens:* Abdomen distended, as if in the last month of gestation; the enlargement differing, however, from that of pregnancy, in being more in a transverse than in a longitudinal direction. Distinct fluctuation from every side, as if caused by ripples of large size, is every where present. No solid tumor and no fœtal parts can be felt, and no fœtal tones heard. On vaginal examination, the uterus is found in the median line, and measuring two and a half inches. The portio vaginalis is consistent, and bears marks of laceration. On percussion, flatness over the entire enlargement. Hypochondrii tympanitic. Along the left side of the abdomen tympanitic sound as low as the crest of the ilium, and remaining even when the patient lies on the left side. On the right, dullness on percussion. No boundary can be found as the flat percussion sound of the liver passes into that of the tumor. The lower edge of the liver can not be determined. Superiorly tympanitic sound. The line of separation of tympanitic and flat percussion sounds presents a curve whose convexity looks upward. No variation in the boundary line of flatness or tympanites on change of position. Urine has specific gravity of 1018. No albumen. Urates often present. The respiratory and circulatory organs normal. Diaphragm (right and left), in the fifth intercostal space.

Diagnosis—Unilocular ovarian cyst.

Jan. 14, 1868.—Temperature, which was carefully noted twice a day from the time of admission, averages 37.45 Cels., having at no time exceeded 39.00, nor been less than 36.20. The pulse ranged between 72 and 104, and averaged 87. The patient was transferred to the surgical wards to prepare for the operation of ovariotomy.

Jan. 16.—After the patient had been brought under the influence of chloroform, Dr. Heine made an incision about three inches in length, between the umbilicus and symphysis, in the linea alba, through the abdominal walls. This exposed

the cyst. Spencer Wells' trocar was plunged into it. The walls of the cyst gave way more than necessary, and the fluid rushed forth at the side of the trocar. This was withdrawn, sharp hooks were fixed in the margins of the wound in the cyst, and in this manner it was prevented from retracting into the abdominal cavity as the fluid escaped. After the greater portion of the contents of the cyst had been evacuated, it was slowly drawn out. A few slight adhesions to the omentum on the right upper border were loosed with the finger without producing any hæmorrhage worthy of consideration. The omentum was then replaced, the pedicle of the cyst drawn out and fixed in Spencer Wells' clamp, the cyst amputated, and the stump cauterized with *ferrum candens*. The fluid which had escaped into the peritoneal cavity was removed by sponging, and the wound in the abdomen, which had contracted to about two inches, was closed by five simple sutures, the middle one including the peritoneum. Temp. 38.6 Cels. Pulse 108. Fifteen drops of Sydenham's *laudanum* administered. *Laudanum* to be repeated in the evening.

Jan. 17, A.M. Temp. 38.0; pulse 100. Patient slept during the night. Slight perspiration.

P.M., temp. 40.0: pulse 120. Urine drawn through catheter. Cataplasm over the abdomen.

Jan. 18, A.M., temp. 38.6; pulse 108. But little sleep. Perspiration more profuse. Slight eructation and occasional though transient feeling of weakness.

P.M., temp. 40.0; pulse 120. Umbilical region somewhat distended. Pulse small. *Tr. opii* gtt. x. administered. Sutures removed, and replaced by large strips of English adhesive plaster.

Jan 19, A.M., temp. 37.8; pulse 128. But little sleep. Abdomen tympanitic and moderately distended. Gurgling râles. Subjective symptoms wanting.

P.M., temp. 38.2; pulse 112. The edges of the wound looking well. Plaster renewed. In the evening a small quantity of thin fæces evacuated. The abdomen becomes remarkably less tense. Cataplasm repeated. *Tr. opii* gtt. xv. administered.

Jan. 20, A.M., temp. 37.8; pulse 100. Slept several hours last night, and feels tolerably well. Eructations almost completely gone. Thirst much less. Abdomen but slightly swollen in the region of the cæcum.

P.M., temp. 38.2; pulse 106. Patient removed to another bed, and laid upon an air pillow, as an extended erythema has made its appearance on the nates and over the sacrum.

From this time forward to the 26th, the temperature and pulse were normal, and there was one stool a day. On the 25th, the clamp, which hung only to a few necrotic shreds, was removed. On the right side of the fungiform pedicle, protruding from the wound, and at the base of the latter, is situated a funnel-shaped indentation, which was dressed with *chamomil. infus.* Pedicle itself touched with nitrate of silver. Patient coughs, and with much difficulty expectorates a little mucus. *Infus. Ipecacuan.* was prescribed.

Jan. 26. Vomited several times, after meals and during severe paroxysms of coughing. In the evening temp. 40.0 Cels. Pulse 112.

Jan. 27, A.M., temp. 37.8. Sputa yellow, viscid, pain in the chest. P.M., temp. 39.6.

Jan. 28, A.M., temp. 38.6. The examination of the thorax was made. On percussion: Dullness in a space of four fingers' breadth on the left side, posteriorly and inferiorly. On auscultation: Bronchial breathing, mucous râles. On palpitation: Diminished pectoral fremitus. No pain. Viscid, slimy sputa; patient feels weak. Lips, pale, livid. No dyspnœa nor chilliness. Abdomen soft. Wound looking well, pedicle moderately suppurating, shrunken, and retracted to the level of the abdomen. Wine *decoct. quiniæ* prescribed.

P.M., temp. 40.2; pulse 124. Twice vomiting during the day of food which she had taken. Bitter taste in the mouth. Occasional eructation, frequent cough, sputa brick dust color. No dyspnœa. Cheeks red. Two watery stools in the course of the day. No albumen in the urine. *Decoct. quin.* discontinued.

Jan. 29, A.M., temp. 38.4; pulse 112. Patient complains

of continual and severe irritation to cough. Four diarrhœal stools. Vomited once during the night. Sputa only slightly slimy. Feeling of weakness. On percussion, dullness on the left side, posteriorly and inferiorly, as yesterday. Bronchial breathing more marked. Abdomen slightly distended. Wound granulating nicely, Dressing as heretofore. Prescription of *Flor. benzoiac* 5 grs. every hour. *Tr. opii* 15 drops.

P.M., temp. 40.0. During the day vomited once; had one stool more. Feels easier, coughs less; abdomen still pliable.

Jan. 30, A.M., temp. 38.2; pulse 112. Dullness somewhat higher. Pleuritic friction sound. Increased weakness.

P.M., temp. 39.0; pulse 136. Somewhat more mucus expectorated. Dullness left, posteriorly and inferiorly clearing. Patient always vomits after meals.

Jan. 31, A.M., temp. 37.8; pulse 104. Patient had a very restless night. Eight thin evacuations resembling coffee grounds; restlessness; mouth dry. Expectoration less; no vomiting. Champagne prescribed, and continued from this time forward.

P.M., temp. 40.0; pulse 114. During the day no stool, no vomiting, although she has frequently partaken of broth and egg. Dyspnœa less. Cough and expectoration diminished. Pulse small.

Feb. 1, A.M., temp. 38.0; pulse 116. Very restless during the night. One stool, and vomited once. Cough and expectoration almost gone. Sputa reddish. Weakness great, but not increased. Dullness on percussion on the left side from below upward to about one half the height of the lung, and bronchial breathing above. On the right side rhonchi sonori, percussion normal. Vesicular respiration at the apex. *Amylon enema* prescribed.

P.M., temp. 39.0; pulse 120. Three diarrhœal stools. But little sputa. Physical condition the same. Beginning decubitus. Wound dressed with *Ung. præcip.*

Feb. 2, A.M., temp. 38.6. During the night several thin stools, vomited several times, and slept but little. Examina-

tion of the thorax reveals nothing new. Right side, rhonchi. Dyspnœa, cough and expectoration as heretofore. Wound not granulating so well. Dressed as heretofore.

P.M., temp. 39.0. During the day a number of thin stools. Vomited a fluid of green color. Tongue dry. Decubitus somewhat more marked.

Feb. 3, A.M., temp. 38,0. P.M., temp. 38.6; pulse 132. Had four stools during the night, and vomited twice. *Pot. Riveri* ʒ v. with *Aqua lauro-cerasi* ʒ i. prescribed in tablespoonful doses, and Liebig's essence of beef, tablespoonful every hour. Vomited twice (once bile) during the day. The left parotid somewhat tender and swollen. *Pot. Riveri*, tablespoonful.

Feb. 4, A.M., temp. 37.8; pulse 112. During the night vomited once; three stools.

P.M., temp. 37.6; pulse 96. During the day vomited once. One stool. Pulse somewhat fuller. Liebig's essence of beef given as food. *Pot. Riveri* and champagne continued.

Feb. 5, A.M., temp. 38.6. Increasing collapse, general and local.

P.M., temp. 38.4. During the day, neither stool nor vomiting. Right iliac region somewhat tender.

Feb. 6, A.M., temp. 38. During the night, neither stool nor vomiting. Collapse increases. Afternoon, temp. 38.5. Weakness very great; pulse small. Night, temp. 34. Respiration short and frequent. Sensorium involved. Death, 12 P.M.

Anatomical Diagnosis.—Peritonitis diffusa, encapsuled collections of pus in the vesico and recto-vaginal culs-de-sac (Douglas's). Lobular accumulations in the left lung, fibrinous pneumonia of the right. Acute intestinal catarrh and parenchymatous degeneration of the abdominal glands.

This report, taken from the hospital records, calls for a few general deductions, which, with your permission, I shall attempt to make. The diagnosis of the case was correct, the patient in good condition, and the prognosis favorable. The operation was performed in a masterly manner, without hav-

ing encountered any peculiar or unexpected difficulty. The prognosis might have been better had not a small quantity of the fluid contents of the cyst escaped into the peritoneal cavity. This, however, was removed, and if ever there was a case in which the hope of a speedy recovery might reasonably be entertained, it was this. Yet the patient succumbed in three weeks.

In the editorial to which I have already referred, you advance that, the greater the departure of the peritoneum from its normal condition, the less the danger of interfering with it. This may be true, but we must bear in mind that the greater the change in the peritoneum, the more extensive also will be the adhesions. You do not consider adhesions as unfavorable, but I must regard them as, at least, very unpleasant complications, for they require a longer abdominal wound, serve to protract the operation, and thus increase the shock to the general system. What on the one hand would be gained by lessening the chances of peritonitis, would on the other, be more than compensated for by the more frequent and more severe shock of the operation.*

In commenting on the case before us, it is not my purpose to discuss whether the conditions would have been more favorable had there been more adhesions, or had there been a greater degeneration of the peritoneal membrane, nor to inquire into the immediate cause of the fatal termination, if produced by peritoneal inflammation, or by consecutive pneumonia; it is enough to know that the patient died, and that the fatal issue is a consequence of the operation.

Dr. B. Stilling, of Cassel, in a report on ovariotomy (*Deutsche Klinik* of Jan. 18th, 1868), gives the particulars of a case of multilocular ovarian cyst of ten years' standing, which had been tapped seven times. The patient was well nourished. Ovariotomy was performed, and the patient died in three days. He also reports a case (Feb. 15th), of multilocular cyst (ovarian) of two years' standing, emaciation and

* The opinion of the JOURNAL is that the shock is also less when there is great departure from the normal condition.—ED.

failure of the vital powers keeping pace with the growth of the tumor. Ovariotomy was performed, and the recovery complete in eighteen days.

In the former of these two cases, the general health was good, and no operation was called for as a matter of necessity. In the latter, where the vital powers were sinking, an operation was decidedly indicated.

The results of the operations in these cases, accidentally favor the position I take in the question of what are the indications for operation. In my opinion, the sinking of the vital powers, increasing emaciation, etc., are the true indications; not that they afford any better prospect of success, nor that they facilitate the operation; on the contrary, they make recovery more doubtful, and the operation more difficult. But, in the mean time, the patient is permitted to live (with now and then a paracentesis), in comparative comfort, for an interval of seven, ten, or perhaps twelve years. Is the percentage of recovery *so* great as to justify us in performing an ovariotomy on a person who bids fair to live a number of years without this most dangerous proceeding? The difficulties of the operation are increased by delay, but are we to imperil the lives of those who confide in us, merely because we are too timid to undertake an operation more difficult of execution? The dangers also are increased — those from shock, in particular. Possibly, those from inflammatory process in the peritoneal sac are lessened. Be that as it may, the records do not demonstrate that the advantages of early operations over those deferred to a later period are *marked* enough to encourage us in performing them.

Many cases, in which the ovarian cyst, after paracentesis, requires only a short space of time to refill, do not admit of delay for a number of years. The strength of the patient rapidly declines, the system not being able to sustain the repeated and exhausting efforts it is called upon to make. In these cases we should convince ourselves of the futility of paracentesis, and *then* proceed to operate before the vital powers are reduced to their lowest ebb. The indication remains the

same, the failure of the general health, sooner or later, marking the time when it is our duty to operate.

In this synopsis you will perceive that the patient was well nourished, the cyst unilocular, and containing a serous fluid. It was not tapped in order to avoid forming adhesions. If it had been, it probably would have refilled in a very short time, judging from the brief period it required for arriving at its former dimensions. Still, the possibility remains that the fluid might have been slow in accumulating, and the tumor have been tapped for a number of years. The dangers of the final, radical operation would have been increased, without doubt, but not so materially but that it could have been undertaken with a fair prospect of success.

Yours truly, SAMUEL COLE, M.D.

EDITORIAL.

Items of News and Gossip.

At a recent trial in the United States Court in this city, his Honor, Judge Drummond, sustained a witness in refusing to testify as an expert without having first received honorary fees therefor:

"The Court (Drummond) held that much injustice was probably done, and that, too, not unfrequently, to physicians and their patients, by taking them from their practice to compel them to remain from one to five hours upon the witness stand, that they might be examined as to all they knew or did not know upon a given subject. The whole matter of compelling a witness to testify he understood to be within the discretion of the Court, and, although he had the power to compel an answer, he did not think any exercise of his discretion would be required in this case. The Court further held that it was perfectly proper for parties employing physicians or other experts, to pay them fees before they came into court, and that such payment was morally and legally right, and not to the prejudice of the cause in which they might be called."

This is creditable to the Court, but it is a little funny, to say the least of it, that the witness who made the issue with the examining lawyer is a homœopathist, and, if the testimony in the particular case is to be believed, altogether *in*expert. Physicians called in these cases can control the *honoraria* if they choose to do so. No party to a case, properly defied, would venture an "attachment" to bring an expert into court.——An operator in the Medical College of a State across the lake, has initiated the practice of sending written invitations to prominent civilians ("laymen") in the village and country round about, to be present at his *cliniques* when any cutting is to be done. This may be *en regle* in Portland and Berkshire County, but we have heretofore been so obtuse as to think it expressly prohibited by the *Code of Ethics* adopted by the American Medical Association.—— Professor Green, of the medical department of the University of Michigan, has resigned. It is rumored that A. B. P. proposes hereafter to occupy, "jointly and severally," the chairs of Practice of Medicine and Surgery in that somewhat dilapidated concern. This is said to be the real reason of his late visit to Chicago, to consult with the Apostle, and not, as previously reported, to get the latter's opinion on the propriety of holding on to his original position in Ann Arbor. It is whispered that the Apostle proposes to compromise, by adding a class of *Freshmen* to his educational schedule, especially for the accommodation of homœopathic nurslings. The latter can as well be supplied at the numerously appointed (and reappointed) Reform School in this city as in Michigan, and, meanwhile, save the Board of Regents an immensity of "bother." They have only to repeal their illiberal restriction of the location of the infinitesimal branch to that little but lively State. There is room enough in the southern suburbs of this city for immense attenuation. Let both parties hasten to do these things, and thus prove that a man *can* lie down with dogs and not get up covered with fleas.——And, speaking of fleas, it is said that the "Black Knight," whose prowess has so often saved the University of Michigan from

a want of harmony, visited Detroit the other day to try and patch up an organ in that pleasant hamlet, of which he might become either a pipe or bellows. But the Detroit brotherhood thought him too scratchy for the one, and too windbroken for the other, whereupon he retreated to Ann Arbor again with a very large flea in each ear. We prophesy that he will stay in Ann Arbor, homœopathy or no homœopathy. We suggest to our friend Dr. Lewitt to furnish a Faculty for the proposed hybrid from his tanks of "pickles;" *Harmony* shall thus ever abound.——To the JOURNAL box has come a letter most graphically addressed: "*To the Physician who thinks more of curing patients than having his own way.*" Enclosed was a handbill, offering the usual assurances and certificates of infallibility in the cure of scarlatina, diphtheria, etc., etc., all for ten dollars, cash in hand, with two years' credit for fifteen more. For this sum the author, claiming to be an M.D., offers to inform any physician of the method. We understand a large number of these circulars have been sent to the physicians of the North-west. This "confidence game" will scarcely win among the intelligent practitioners of this section. Meanwhile, if we had our "own way," we should lose patience long enough to compel the author of the handbill to swallow both it and his nostrum.——Professor Peaslee's last case of ovariotomy died on the fourth day, although apparently doing well until a few hours before death. "Commenced vomiting up dark green matter—vomited large quantities, and violently, and *collapsed in twenty minutes.*" Jacobi said the vomiting was *cerebral.* Hamilton does not like ovariotomy; J. R. Wood, ditto. Too uncertain; it is a kind of surgery you can tell nothing about, etc., etc.,—as we extract from a private letter from New York. The letter from our Heidelberg correspondent on this subject will attract attention. So far as present appearances go, the operation is speedily to become much less frequent, if not pass into desuetude.——Dr. Emmett, of New York, who probably stands unrivaled in this country as an operator in *uterine surgery*, opposes vehemently the operation of dilatation of the female

urethra for the removal of stone. Our gossip says: "He makes a vesico-vaginal fistula. Such as *he makes* he has not the slightest trouble in closing—will often close themselves. He has been operating on a number of cases for painful, non-curable chronic cystitis, by making a vesico-vaginal fistula, and letting the bladder *rest a year!* That was new to me in the way of *surgical therapeutics*. Says there is not the slightest difficulty with the fistula. He makes it at a point where there will be *no loss of tissue*. Indeed, the parts coapt so well that the surgeon has to break up the adhesions once every twenty-four hours for quite a time, in order to get a fistule."——One of the Chicago Sanitary Inspectors gives us a case wherein small pox being present in a family, they refused to have any one of their three unprotected children vaccinated, because their physician said, if they should happen to take the small pox, the addition of the vaccine disease would add greatly to the danger. So strong was their faith in this statement, that the three children were spirited away for fear the Board of Health would seize and vaccinate them *nolens volens*. At present writing, one of the three is already down with variola.——The Board of Health are entitled to great credit for the persistent efforts they have put forth to secure general vaccination of the children in the city.—— The "*Hahnemann Medical College*" building, in this city, has been seized by the officers of the United States government, it having been used as a cover to a *vinegar factory*, in which the shrewd detectives found a concealed still, with all its appurtenances. It is claimed, however, that the still was only in use for preparing "mother tinctures" and attenuations. There is much consternation in homœopathic circles in the city over this *mesalliance* of vinegar, whisky, law, and infinitesimals. The Faculty of the College refuse to testify as *experts* in the litigation which is to follow, unless allowed honorary fees. It is hoped these will be properly liquidated. ——The New York *Medical Gazette* attributes the establishment of the homœopathic department of the University of Michigan to the attempts made to remove the previously

existing medical department to Detroit. Of our own knowledge, these attempts were abandoned years ago, and had nothing to do with the affair whatever. The recent defeat of the prohibitory liquor law in Michigan, the $2 00 tax on whisky, and the recent seizure of the Hahnemann College in this city, show that it is a well concocted plan of the "whisky ring" to establish a huge manufactory of contraband spirits, to be run at the expense of the Peninsular State.

Richmond (Va.) Medical Journal.

This excellent monthly, which failed to reach our *sanctum* for so long a period that we feared its suspension, comes again to hand in excellent style, and with varied and valuable contents. It is edited by E. S. Gaillard, M.D., Professor in the Medical College of Virginia. It is now the largest medical monthly in America. Liberal club and premium rates are offered. We will furnish subscribers with *both* the *Chicago* and *Richmond Medical Journal*, at $5.00 per annum. Address the Editor of this journal, or Professor E. S. Gaillard, M.D., locked box 32, Richmond, Va.

☞ Will Dr. Gaillard address his exchange to this journal, Box 1948? We lose many of our most valued exchanges by carelessness in distribution at the P.O., meanwhile receiving and being obliged to return a parcel of homœopathic and other trash, which interests us in no wise.

Illinois State Medical Society.

The annual session of the society occurs, the present year, the *third Tuesday in May.* The place of meeting has been fixed at Quincy, in Adams county. As this point is easily accessible by railroad from all parts of the State, is a beautiful city, its citizens hospitable, and its medical corps enthusiastic and of a high order of talent, a more desirable locality could scarcely have been selected. A very agreeable time may confidently be anticipated. Many subjects of great importance were laid over last year for consideration at this meeting, and it is hoped there will be an unusually large

attendance. The fruit and vegetable questions having been exhausted by the elaborate and frequent speeches of our friend J. last year—the sphygmograph having proved that three fingers of Bourbon produce the same effect as three weeks of typhoid fever—the Chicago Sanitary Board having cleaned the city of chances of cholera, there will remain every opportunity to "elevate the profession by appeals for legislative help therefor," or by resolving that the number of graduated practitioners shall be restricted by Utopian regulations—or, which perhaps would be a more feasible, common sense and compendious way, by discussion of strictly scientific medical subjects, of which there are an abundance in waiting.

Let the city of Quincy this year, at all events, be a professional Mecca; or a Jerusalem, to which the tribes shall go up, each man to be taxed according to his mental ability.

Duties of the Medical Profession.

Valedictory Address to the last graduating class of the Medical Department of the University of Michigan, by E. O. Haven, D.D., LL.D., President of the University. An eloquent and high-toned tribute to the profession, which alone would stamp its author as a clear-headed thinker and an acute observer, free from *isms* and cant of all sorts. We have marked several passages for publication in this journal, as soon as space will permit. The bold stand taken by President Haven against accepting the *bribe*, although unsuccessful in result, entitles him to the thanks of the profession, as his high attainments and purity of character demand the esteem and confidence of the community.

Errata.

(Dr. Earl's Article.) Page 220, first line: for "the important," read "two important."

Page 221, seventh line from bottom: for this disease," read "Pott's disease."

Page 222, seventh line from top: for "tone," read "line."

Page 227, fourth line from bottom: for "healing," read "treating."

SOCIETY REPORTS.

CHICAGO MEDICAL SOCIETY.

At the regular annual meeting of the society, held in the Court House on the evening of the 3rd inst., the following officers were elected for the ensuing year:

President—Dr. C. Marguerat; *Vice-President*—Dr. R. G. Bogue; *Secretary and Treasurer*—Dr. P. S. Macdonald; *Board of Censors*—Drs. Wickersham, Reid, and Loverin; *Committee on Ethics*—Drs. Davis, Paoli, and Ross; *Sanitary Committee*—Drs. Hatch, Trimble, and Seely.

Delegates to the meeting of the American Medical Association, to be held at Washington on Tuesday, May 5th, 1868, were chosen as follows: Drs. R. C. Hamill, G. Reid, A. Fisher, G. C. Paoli, E. L. Holmes, and Rush.

The following were elected delegates to the meeting of the Illinois State Medical Society, to be held at Quincy on the third Tuesday in May, 1868: Drs. G. S. Hildreth, E. L. Holmes, Ira Hatch, T. D. Fitch, Thomas Bevan, R. G. Bogue, G. C. Paoli, N. T. Quales, John Guenin; G. M. Hutchinson, G. Reid, DeLaskie Miller, E. Marguerat, F. O. Earle.

It is said that a resolution was adopted instructing the delegates not to vote for any person as an officer, in either the State or American organization, who is not a member of a local society, if there is such an one in the county from which he hails.

CHAMPAIGN COUNTY MEDICAL SOCIETY.

The fourth regular session of the society was held at the office of Dr. C. H. Mills, in Champaign City, Wednesday, the 1st of April, 1868.

The association was called to order by the president in the chair. Minutes of the previous meeting were read and approved.

A very interesting paper was read on the use of the speculum in the treatment of uterine diseases, which was discussed with spirit and profit.

The following officers have been elected for the ensuing year.

President—Dr. C. H. Mills; *Secretary*—Dr. S. H. Birney; *Senior Vice-President*—Dr. W. Somers; *Junior Vice-President*—Dr. W. R. Earheart; *Treasurer*—Dr. I. T. Pearman; *Censors*—Dr. H. C. Howard, I. McHugh, M. S. Brown. Delegates to Illinois State Medical Association—Dr. W. Earheart, and Dr. S. H. Birney.

On motion, the secretary was directed to prepare an account of the association for publication, and send to the CHICAGO MEDICAL JOURNAL.

On motion, the society adjourned to meet in Urbana the first Wednesday in June.

I am happy to state that the society is in a very flourishing condition.

SAMUEL H. BIRNEY, *Secretary*.

THE BRAINARD MEDICAL SOCIETY.

The society met in the Court House in Winamac, Indiana, April 6, 1868. The president, Dr. F. B. Thomas, in the chair. Minutes read and adopted.

The annual election of officers resulted as follows:

President—F. B. Thomas; *Secretary*—I. B. Washburn; *Treasurer*—A. M. Pearson; *Censors*—Drs. Wm. Kelsey, Wm. T. Cleland, and J. W. C. Eaton.

Dr. R. W. Jackson, of Monterey, Indiana, was admitted to membership.

Drs. L. D. Glazebrook, W. T. Cleland, I. B. Washburn, and J. B. Hoag were elected delegates to the State Medical Society.

Dr. Hoag read a paper on "Typhoid Fever."

Cases of convulsions were reported by Drs. Hoag, Thomas, and Cleland, and discussed by most of the members present.

Dr. Eaton was appointed essayist.

Adjourned to meet in Winamac, Indiana, Tuesday, May 5th, 1868.

I. B. WASHBURN, M.D., *Secretary*.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—MAY 15, 1868.—*No.* 10.

DISCOVERY OF A NEW ANATOMICAL FEATURE IN HUMAN BLOOD CORPUSCLES.

BY J. W. FREER, M.D., PROF. OF PHYSIOLOGY IN RUSH MED. COLLEGE.

WITH the aid of Wale's Illuminator, by which blood corpuscles may be seen by reflected light, or as opaque objects, I have discovered that these bodies are not, as heretofore supposed, simply bi-concave discs; but, on the contrary, (by the aid of the above instrument) there may be seen a nipple-like eminence in the centre of the concavity of each well-formed disc. This papillary eminence is about $\frac{1}{10000}$ of an inch in diameter at the base. That it is a true anatomical form, and not a change incidental to desiccation, etc., is shown by its appearance at the instant of withdrawal of any given specimen, while the corpuscles are still plump, and smooth in all other respects.

By the use of the illuminator, I have also become convinced that among different individuals, there are always characteristic differences existing, concerning minute variations of feature, form, and perfection of the blood particles, and this obtains irrespective of apparent general physiological conditions.

The advantages offered by the illuminator for the satisfac-

tory study of the external forms of histological elements is, I believe, as yet scarcely understood. This is probably due to the difficulties attending the acquirement of the successful use of the instrument. The method of its proper use once attained is rewarded by revelations at once unique and instructive. By its means all particles may be seen as solid objects, and as distinctively as pebbles on the sea shore. Blood corpuscles are as truly defined on the opaque slide as specimens of Boston crackers on a lacquered tea tray, and thus seen, are indeed objects of great beauty.

I do not at present propose to offer a theory concerning the signification of this heretofore undescribed anatomical feature of human blood discs; but one can scarcely avoid associating its presence with the long sought for nucleus of these bodies. The illuminator reveals the acknowledged nucleus of frog's blood cells as an eminence on their outer walls.

Over one year ago I called the attention of Dr. W. C. Hunt, of this city, to the peculiarity in human blood discs above related, but, notwithstanding, have delayed publication until, by repeated observations, the facts might be thoroughly confirmed or contradicted.

I take much pleasure in offering my obligations for Dr. W. C. Hunt's invaluable assistance in developing the proper method of using the illuminator.

TREATMENT OF DIPHTHERIA.

Submitted to the Chicago Medical Society by DeLaskie Miller, M.D., *Professor of Obstetrics, and Diseases of Women and Children, in Rush Medical College.*

Mr. President:—The subject before the Society for discussion this evening being the *Treatment* of Diphtheria, reference to the history, symptoms, and diagnosis of the disease is precluded.

This circumstance, however, presents but few embarrass-

ments in this discussion. We must accept the diagnosis furnished us, and in general terms, also the pathology. Fortunately the materials are abundant, both in the literature of the profession upon this subject, and in the personal observations of the members of this Society. The repeated visitations of diphtheria to this city during the last ten years, have afforded ample opportunities to verify or correct the descriptions of this disease which have reached us from other sections of the country.

To be rational and successful, the treatment of any disease must be based on definite and correct ideas of its pathology. The views entertained and promulgated, of the nature of diphtheria on its first appearance, abroad as well as on this side of the Atlantic, were in the main partial and defective, in this, that the disease was regarded as essentially an *Angina* — a local disease of the throat. And believing this, efforts were directed mainly to the mitigation of local symptoms. From the time that Bretonneau named the disease, from what he believed to be an ever present and characteristic (?) appearance of the throat, writers have given the first and most prominent place to a description of the appearances in and about the throat, and sometimes to the exclusion of the general symptoms; leading to but one conclusion, viz.: that the local manifestations were regarded by such as the disease. Bretonneau taught that "its specific character consists, anatomically, in the formation of a false membrane, of definite structure; pathologically, in the power of reproducing itself." And this doctrine has been reproduced, from first or second hand, again and again, from that time to this.

A few citations may satisfy that this position does no violence to fact. If we may inter what views are entertained of the nature of a disease by the course of treatment recommended for its cure, then we can be at no loss in the following instances, taken from many: Trousseau said, "Topical medication is, *par excellence*, the treatment, notwithstanding the opposition to it." West says, "Two main points are involved in the treatment of the disease; the one, the control

of the local symptoms, the other the support of the constitutional powers;" and again, "local remedies then take a very prominent place in the treatment of diphtheria." Bennett advises "iced water and steam internally, and poultices externally." And Aitken, after diuretics and cathartics, inhalation of aqueous vapors, acidulated with *Acetic acid*. Condie seems to represent the opposite extreme by advising, 1st, Emetics; 2nd, Abstraction of blood; 3rd, *Calomel* in large and repeated doses. But these references must suffice.

Doubtless much remains to be learned in regard to the nature and treatment of diphtheria; sufficient, however, has been determined, to leave no doubt that its constitutional complications are even more important than the local manifestations, for if we subdue the former early, we prevent the latter.

In this connection the following inquiries are pertinent. In diphtheria, what danger is to be apprehended? What complication is to be feared? What sequelæ are to be warded off? The answers to these interrogatives will lead us to the positive indications of treatment.

1st. Prostration of the patient's strength, and exhaustion of the vital forces of the system. These are liable to appear early, and sometimes unexpectedly, The explanation is most readily found in the changes in the quality of the blood.

2nd. The local complications — swelling of the glands, and the formation of the false membrane, which may extend so as to endanger life.

3rd. Paralysis of certain parts, which in some cases aggravates the danger, and shows how profoundly the nervous centres may be implicated.

These possibilities should be kept constantly in mind, in the treatment of every case of diphtheria, and our most efficient agents applied to anticipate, and thus prevent them.

In almost every case, a cathartic is indicated, though the bowels may have moved at regular intervals, they are seldom thoroughly evacuated. The fæcal matter retained, besides causing local irritation, is constantly undergoing changes, and

gives rise to the accumulation of fœtid gases, which are re-absorbed to produce their septic influences on the blood. This may be prevented by completely evacuating the bowels, not by a drastic purgative, which by its perturbing effect, might aggravate the depressing effects of the disease, but by a mild and efficient agent, such as *Ol. ricini*, with the *Ol. terebinthinæ*, in quantities and proportions to suit the age of the patient.

Commence immediately with a prescription containing antiseptic, tonic, restorative and eliminative agents. I am in the habit of prescribing something like the following, varying the proportions to meet the peculiarities of the particular case, viz.: ℞. *Tr. ferri Chloridi* ʒ ii, *Potas. chlorat.* ʒ ii., *Morph. muriat.* gr. i., *Acid. muriatic. dil.* ʒ ii., *Aq. destil.* ʒ i., *Syrupi*, ʒ ii. M. S. Dose, a teaspoonful every 2nd or 3rd hour; or in urgent cases, every hour.

It should be taken without further dilution, for in addition to its general effect, it is the most efficient local application we can make. To prevent irritation of the stomach, a few swallows of water may be taken just before the medicine. Nutritious food, liberally, is of the first importance. In the majority of cases no other treatment will be required.

I have followed this plan of treatment so long, and applied it in so many cases, with such almost unvarying success, that I feel justified in believing that these remedies may act upon the volume of the blood, and upon the capillary vessels, so promptly, as to prevent the exudation and the formation of false membrane upon the mucous surfaces. I believe we may prevent the appearance of albumen in the urine, or if it is already present, these remedies will lessen the quantity, and soon remove it. Of course I speak of the presence of albumen, as the result of diphtheria. May not the *Tinct. ferri chloridi* so sustain the innervation as to prevent the paralysis of the pharynx and the heart, which, in some cases, is the greatest element of danger? I believe so.

But we may be called after the membrane has formed; then if the remedies already prescribed do not arrest its fur-

ther development, and especially should it be extending downward, as it sometimes does, I would hardly think of making local applications with the probang.

The objections to this mode of treatment are:

1st. That it is distressing to the patient.

2nd. If the false membrane has formed, and presents the hard, unyielding pellicle described by careful observers, the application is made to an insensitive surface, and can be beneficial only so far and to the extent that it acts as a chemical solvent.

3rd. It can seldom be applied to the entire surface implicated.

4th. Under such circumstances, the vital tissues involved are unaffected by the operation, because they are not touched by the application.

I believe that inhalations will fill the indications under these circumstances, more perfectly. When the spray is inhaled from the atomizer, we may charge it with agents which we may suppose produce an alterative effect upon the diseased structures, or a chemical action upon the deposit on the surface of the mucous membrane. Then we add to the effect of medicines, the soothing and relaxing effects of warm aqueous spray, carried into the passages as far as the disease extends.

Hydrochloric acid has the power of dissolving fibrin, a weak solution, no stronger than 1 part in 1000 will do this. Should this not be used by the atomizer?

Or upon the supposition that *sporules* or *fungi* constitute an essential part of the false membrane, as has been affirmed, would not the spray of a weak solution of *Carbolic acid* be the most active and certain agent for their destruction, at our command? From the reputed efficacy of *Carbolic acid* in destroying parasites of all kinds, should we not expect beneficial results from its use in this manner?

I speak interrogatively of this use of these remedies. I have not been compelled to use them. Analogically they are indicated.

I make no reference to tracheotomy, for I have had no experience that would warrant me in consuming the valuable time of the Society. Nor have I any *special* suggestions to make upon the treatment of paralysis, which is an occasional sequela of diphtheria.

A desire to abbreviate, as much as possible, what I had to say, has prevented the elaboration of several points, which come within the scope of discussion, to the extent their importance demands. Such as the use of stimulants, and the mode of introducing nourishment in extreme cases; the management of enlargement of the glands, sub-maxillary and others, so frequently met with, which is caused by engorgement, and, fortunately, unattended by a tendency to suppurate.

CALCAREOUS DEGENERATION OF THE PERICARDIUM.

BY CURTIS T. FENN, M.D., CHICAGO.

THE following history was read in the Chicago Medical Society, and by request of the Society is sent to the JOURNAL:

James Owens, a laborer, sixty-five years old, born in Ireland, was admitted to the County Hospital Dec. 19, 1867. His complexion was sallow, eyes dark, with well marked arcus senilis. His feet and legs were œdematous and cyanotic, body emaciated, and remaining teeth worn, and free from decay.

After being carried to his bed, he assumed a semi-recumbent posture, keeping his left side a little raised. His circulation was always excitable, irregular, intermittent, and feeble. The radial pulse was felt with difficulty, owing to what seemed to be an obstruction in the walls of the artery. The apex beat of the heart was perceptible an inch to the left of its normal place; but there was a total want of rhythm, and a sense of distance in the sound. No friction sounds or murmurs were detected. Respiration was irregular, sighing, and

imperfect, especially at night. His mental faculties were disturbed, passive delirium being generally manifest. His words were always incoherent, articulated in a mumbling way, so that rarely a word was intelligible. No paralysis was detected. He seemed often to have pain in his head. The pupil was contracted. The tongue was usually dry, brown, trembling, and pointed; appetite feeble; bowels constipated; urine normal in quantity, transparent, specific gravity 1012, reaction slightly acid, containing albumen which when coagulated formed a deposit equal to one fourth the whole volume. Nothing reliable was learned of his antecedent history, except the statement of his daughter, that he had once had rheumatism.

He was put upon a half ounce of gin, fifteen drops of *Tincture of chloride of iron*, and five grains of *Iodide of potassium*, three times daily. No amelioration of any of the symptoms followed. The patient died Feb. 2, 1868.

Autopsy forty-eight hours after death:

Emaciation was marked. The lungs were full of dark blood. Some old adhesions of the right pleura existed, and the middle lobe of the right lung was hepatized. The coverings of the heart in situ appeared normal, until an attempt was made to cut into the pericardium. Within its tissue was found an extensive deposit of calcareous matter, which covered the whole anterior face of the heart, and about half of the posterior. It spread out like a shell, being thickest where the pericardium unites with the central tendon of the diaphragm and gradually becoming thinner as it extended upward from the base in two parts, resembling the bivalve of an oyster, the distance of four and a half inches anteriorly, and three and a half posteriorly; the deposit was deficient over the upper part of the left margin of the heart, and extended to the right a little beyond the ventricular septum. A firm adhesion existed between the apex of the heart and base of the sack. This was severed, and the heart removed without injury to the shell. It maintained then the shape of a cup, somewhat irregular in outline, but capable of holding half a pint. The inner

surface of the pericardium was roughened in spots by the concretion; otherwise both surfaces were smooth. The heart was enlarged and softened, and covered with a pearly deposit of plastic lymph. The right auricle and ventricle were filled with coagulum, and dilated. The tricuspid and mitral valves were calcified along their free border, but not impaired as to their sufficiency. The arch of the aorta, about the opening of the left subclavian, presented a roughened and calcified surface a square inch in area. Plastic deposits appeared along the inner surface of the thoracic aorta. The liver was enlarged and indurated, as if from chronic inflammation of the capsule; the gall bladder distended with black fluid. The kidneys were both atrophied to about one third their normal volume; the pyramids and cortical substance appeared blended, and contained cysts varying in size from that of a hazel nut to that of a pin head. One bore a cicatrix, as though a cyst had ruptured on the surface.

An examination of the brain showed a deposit of serum within the subarchanoidian space, but no lymph, and no adhesions. There was calcareous degeneration of the internal carotid and vertebral arteries, with the branches forming the circle of Willis. The walls of the ophthalmic arteries also were hardened, and their calibre diminished by the same foreign deposits. These degenerate arteries were not saved. The heart, pericardium, and arch of the aorta, are preserved in the County Hospital Museum.

February 14, 1868.

FOREIGN CORRESPONDENCE.

VIENNA, *April 8th*, 1868.

To the Editor of the Chicago Medical Journal:

DEAR SIR,— After a prolonged sojourn in Heidelberg, I took advantage of an offer made to me by Dr. Knapp, Professor of Ophthalmology in that city, to accompany him on a

scientific tour through several of the principal cities of Germany.

Our first stopping place was Munich, where we visited one of the most celebrated opticians of Europe, Mr. Steinheil. His institution enjoys the highest reputation for accuracy of manufacture of perfectly aplanatic dioptrical objectives, of prisms, and of glass plates with plane and parallel surfaces. To fabricate these latter without a trace of astigmatism, *i. e.*, without any irregularity of surface, or inequality of refractive power, is recognized as one of the most difficult tasks of practical optics.

Selecting from many interesting things, I may mention two applications of optics to practical ophthalmology, one consisting of an easy method of expressing the various degrees of refractive and accommodative power by the size of angles instead of the inverse value of their focal distances (*i. e.*, 1 divided by the focal distance of the lens). This method renders the calculation much simpler by substituting integral for fractional numbers. On the other hand, it appears less convenient for practical purposes since the degree of hyperopia or myopia is expressed in a way different from that of the visual distance of the eye. To render this clearer, I must resort to an illustration. If a ray of light coming from a luminous point fall upon a lens at a certain point above its axis, the refractive power of this lens may be measured by the angle of deviation which the refracted ray undergoes. The higher the refractive power of the lens, the greater will be the angle of deviation. Mr. Steinheil found by calculation that for a given and very small *height of incidence* (distance of the point of incidence from the axis) the angles of deviation for different lenses, the luminous point remaining stationary, are as follows:

REFRACTIVE POWER OF LENS EXPRESSED

By angle of deviation in seconds.	By focal distance in inches.	By angle of deviation in seconds.	By focal distance in inches.
1	120.	15	8.
2	60.	20	6.
3	40.	24	5.
4	30.	30	4.
5	24.	40	3.
6	30.	48	2.5
7	17.14	50	2.4
8	15.	60	2.
9	13.33	80	1.5
10	12.	100	1.2
11	10.91	120	1.
12	10.		

By this table you will perceive that the refractive power of a lens of $\frac{1}{120}$ is equal to an angle of deviation of 1″; consequently an augmentation of refractive power of $\frac{1}{120}$ increases the size of the angle of deviation by 1″. If, for instance, a short-sighted person can see plainly at eight inches distance, modern ophthalmologists say that the grade of his myopia is $\frac{1}{8}$. According to Mr. Steinheil, we would say that is equivalent to an angle of deviation of 15″. The method in use expresses the visual distance and the degree of myopia in the same manner, whilst Steinheil's has the inconvenience that the degree of myopia is expressed by an angle, the visual distance being, of necessity, expressed by its length.

As it is probable that both methods will be used, and an easy reduction from one to the other can be made, I thought it useful to send the foregoing table to you.

Another interesting object was a peculiar lens, constructed on the terrestrian telescopes, for the use of very short-sighted persons. The apparatus is a truncated glass cone, three-fourths of an inch in length, its diameter at the middle, one third of an inch, its broader extremity convex, its smaller, concave. Aside from its portability it has the advantage, when its convex surface is directed at distant objects, of magnifying slightly. When we consider that the ordinary strong con-

cave glasses, such as are required by the higher grades of myopia in order to see distant objects with distinctness, diminish their apparent size so considerably as to render them almost useless, we can conceive what benefit can be derived from this combination of convex and concave surfaces.

We next visited Prof. Rothmund's Ophthalmic Hospital, containing about forty beds, and there had an opportunity of seeing a number of cases of a peculiar (hitherto undescribed) skin disease, subsequently complicated with cataract. They all were of children coming from a village, situated in a valley of the Bavarian Alps. This village is rather isolated, consequently marriages among kindred very frequent.

During the first months the children appeared healthy. At the fourth month, or somewhat later, the integument of the face and extremities became thickened, and covered with red patches, whilst the trunk itself remained unaffected. On microscopical examination, the disease proves to be a dermatitis, with hypertrophy of chorion and epithelial layers, the most remarkable characteristic of which is, that as the affection spreads, both crystalline lenses become cloudy, and in the course of a few weeks, completely milky and opaque. It is the ordinary soft cataract, and can be operated (discission) with favorable prognosis. That these cataracts should occur as complications to a dermatitis is a highly interesting sequence of the fact, so well known in embryology, that the lens is formed by inversion of a portion of the skin, both tissues, so different in ultimate structure but of common origin, undergoing the same pathological changes.

This coincidence would have been utterly inexplicable if the development of the lens from the epithelial layer of the fœtal integuments were not known.

And now, my dear sir, I fear that it may not be so interesting for you to read, as for me to write these descriptions, and therefore beg leave to sign myself,

Yours, truly, DR. SAMUEL COLE.

CORRESPONDENCE.

Chicago Medical Journal.

PHILADELPHIA, March 26, 1868.

The two deaths which occurred during the last session of the College, and the long list of cases I sent you in my last letter, were both "stone cases." The first, J. D., aged 52 years, had suffered severely for three years before the operation. There was, and had been for nearly two years, excessive tenderness in hypogastric region. Had neuralgia of bladder, and neuralgia affecting him in various parts of the body. He was much emaciated, and could neither eat nor sleep. The operation (lateral) for lithotomy was performed, and a small stone was removed from the bladder. Immediately after the operation he complained of excessive pain in hypogastric region, darting up the left side, and down the corresponding thigh. This continued, with its severity never lessened, but constantly varying, for eleven days, when death ended his sufferings. *Post-mortem* examination revealed no feature of interest, and the opinion was that death ensued from neuralgia.

The second case was that of P. T., age 24 years. Has been sick for four months. Rupture of urethra, with formation of sinuses around the upper and inner portion of the thigh. A rat-tail catheter was introduced into the bladder, and allowed to remain. The sinuses were examined, and setons were passed through all of them but one, which was opened. Ten days after this, the patient had improved. The catheter had been retained in the urethra, and the sinuses in the thigh had lost much of their angry appearance. Most of the water passes through the catheter. The membranous portion of the urethra is ruptured by the retention of the urine. There is very great difficulty in passing the catheter.

Perineal section was performed; the membranous portion of the urethra divided, and catheter left in.

Four days after this, the patient died. *Post mortem* revealed the following: Both kidneys enlarged, and in each was a small abscess, throwing its pus through the ureters into the bladder. The bladder was congested, and was ribbed throughout. A small stone was found closely imbedded in its walls. The prostatic and membranous portions of the urethra were ruptured in several places.

No. 3. J. S., age 40 years. Unable to procure any of his former history, except that he had suffered with "stone in the bladder for three years," and that during the last three months he had been unable to move about at all. He was pale, anemic, and generally debilitated. His appetite had left him, his pulse was weak, and he was suffering agonizing pain. On sounding, a stone of large size was felt in the bladder, but his extreme prostration forbade an operation at once. His urine was alkaline in character, and filled with pus. Upon pressure over his left kidney, he suffered great pain, while upon his right the pain was very slight. *Muriatic acid*, largely diluted, was injected into the bladder several times. *Opiate enemata* were used. *Morphia*, milk punch, beef tea, and good nourishing diet were given him, but to no purpose; he dying ten days from day first seen. The following notes I took at his *post-mortem* examination.

Urethra, healthy. Rectum, healthy. Prostate gland, enlarged and suppurating. Bladder, walls thickened and filled with pus. Inside coat of a dark slate color; orifice of bladder at ureter very small. A stone shaped in exact conformity with the bladder, and very large, was found. It was a lithate, covered with a phosphatic deposit. Ureters both very large, thickened and filled with pus. Left kidney fully twice its normal size. Pyelitis. Cortical portion, yellow and mottled, and in one portion entirely destroyed. Bright's disease evident. Right kidney, about its normal size, but dark and soft, and evidently diseased. Urine in kidney, alkaline. Veins much enlarged. Arteries normal. There was a long chain of lym-

phatic glands of very large size, embracing the entire outer border of the left kidney.

The two former cases were at the college clinic, and as I before mentioned, were the only deaths that occurred. The latter case happened away from the clinic, but was to be brought before the class for operation when strength could be got. In writing of stone cases, I would notice that Dr. Gross has performed recently the operation of lithotomy, wherein he removed *eight stones* from the bladder, ranging in size from that of a pigeon's egg to the largest, that of a hen's egg. The patient is now nearly well.

Yours, etc., E. R. H.

BOOK NOTICES.

ATLAS OF VENEREAL DISEASES. By A. CULLERIER, Surgeon to the Hôpital Du Midi, Member of the Surgical Society of Paris, Chevalier of the Legion D'Honneur, etc. Translated from the French, with Notes and Additions, by Freeman J. Bumstead, M.D., Professor of Venereal Diseases in the College of Physicians and Surgeons, New York, etc. With about one hundred and fifty beautifully Colored Figures, on twenty-six plates. Philadelphia: Henry C. Lea. 1868. To be complete in Five Parts, $3 each. For sale by W. B. Keen & Co., 148 Lake Street, Chicago.

The reception of Part First of this splendid work was acknowledged on p. 213 of the JOURNAL. Part Second, just received, more than sustains the high anticipations which the first awakened.

The artistic execution of the work does high credit to the publisher. A friend who is familiar with the original assures us that the plates in the American edition are, in every particular, equal if not superior to the transatlantic copy.

The JOURNAL confesses never to have seen more vivid portraitures of pathological changes than here given. When completed, we shall have the parts bound in morocco and gilt edged.

Professor Bumstead has discharged his duties as editor with great fidelity. Himself a "dualist," and Cullerier a "unitist," he nevertheless comments with perfect candor and the fairness of assured strength. His own views are set forth in the introduction, with a sketch of the History, Virulence, Contagion, Evolution, Inheritance and Pathological Anatomy of Syphilis.

Part I. of the text discusses blennorrhagia in the male, complications and treatment. Part II. continues discussion of this branch of the subject, with especially noticeable chapters on blennorrhagic ophthalmia and arthritis. These two sections alone are worth more than the cost of the complete work. Then follows a sketch of blennorrhagia in the female, with its complications, under the captions Vulvitis, Vaginitis, Metritis, Ovaritis, and Urethritis—a concentrated and yet exhaustive *resumé* of the subject.

Chapter III. develops the subject of vegetations, and is illustrated by plates of most exquisite (pathological) beauty. This fasciculus is concluded by the commencing chapter of the section on soft chancre, with the best illustrative plates we have ever seen. We await the completion of the work with extreme interest, and in the meanwhile strongly recommend it to all of our readers at all interested in the subject.

A COMPLETE LIST OF THE MUSCLES OF THE HUMAN BODY. By WILLIAM LITTLE, M.D., Chicago. A Chart, size 24 by 38, giving the name, origin, insertion, and use of all the muscles in the human body. Price 50 cents; mounted on rollers, $1 50.

Also, the Cranial Nerves, twelve pairs, giving the name, origin, foramen of exit, distribution, and function. Price 20 cents. Address William Little, M.D., 220 Indiana street, Chicago.

A MANUAL OF THE DISSECTION OF THE HUMAN BODY. By Luther Holden, F.R.C.S., Assistant Surgeon of, and Lecturer on Anatomy at St. Bartholomew's Hospital, London. With notes and additions by Erskine Mason, M.D., Demonstrator of Anatomy at the College of Physicians and Surgeons, and Surgeon to the Charity Hospital, New York. Illustrated with numerous wood engravings. New York: Robert M. DeWitt, Publisher, No. 13 Frankfort street; pp. 588. For sale by W. B. Keen & Co., 148 Lake street.

A much needed and excellent manual. The illustrations are clear and elaborate, the descriptions concise and perspicuous, and the general artistic and typographic execution of the book, of a high order of merit. The American editor has performed his duty with fidelity and sound judgment.

As a companion in the dissecting room, or to refresh the memory of the practitioner, we cordially commend it to our readers.

THERAPEUTICS AND MATERIA MEDICA. A Systematic Treatise on the Action and Uses of Medicinal Agents, including their Description and History. By Alfred Stillè, M.D., Professor of the Theory and Practice of Medicine, and of Clinical Medicine, in the University of Pennsylvania, etc., etc. Third edition, revised and enlarged. In two volumes. Philadelphia: Henry C. Lea, 1868. For sale by W. B. Keen & Co., 148 Lake street.

This work, of course, does not require introduction to the intelligent readers of the JOURNAL. The second edition has been for many months out of print, and the author has, in the interim, been busily occupied in the selection of every thing of substantial value among recent advances in the science and art of Therapeutics. The subjects now treated of for the first time, are: *Chromic Acid; Permanganate of Potassa; The Sulphites of Soda*, etc.; *Carbolic Acid; Nitrous Oxide; Rhigolene:* and *Calabar Bean.*

The article on *Bromine* has been re-written, and that on *Electricity* materially enlarged and brought up to the times.

It is unnecessary to say that this treatise ranks any yet published on the subject.

SANITARY INSTITUTIONS DURING THE AUSTRO-PRUSSIAN-ITALIAN CONFLICT. Conferences of the International Societies of Relief for Wounded Soldiers. An Essay on Ambulance Wagons. Universal Exhibition Rewards and Letters. Catalogue of the Author's Sanitary Collection. By THOMAS W. EVANS, M.D., Officer of the Legion of Honor; Surgeon-Dentist to the Emperor Napoleon III., and to the Emperor of Russia; United States Commissioner to the Universal Exhibition, etc., etc. Third Edition. Paris: Printed by Simon Raçon & Co., No. 1 Rue Erfurth. 1868. [Printed for private distribution.]

A beautifully printed volume of 257 pages, replete with interesting and valuable information on the important subjects of which the title gives notice. Our sincere thanks are tendered the author for this addition to our library. A private note from Dr. Evans informs us that he has made arrangements with John Wiley & Son, of New York City, to distribute the balance of the edition. Those wishing to obtain copies can address accordingly.

CULLERIER'S ATLAS OF VENEREAL DISEASES. Since the notice of reception of the first two parts on a previous page went to press, Part III. has been received, but too late for comment in this No.

PROCEEDINGS OF THE CHICAGO MEDICAL SOCIETY.

THE ANNUAL MEETING of the Society was held on the evening of April 2nd. The following members were elected officers for the ensuing year:

E. Marguerat, M.D., *President.*

R. G. Bogue, M.D., *Vice President.*

P. S. McDonald, *Secretary and Treasurer.*

Committee on Ethics—Drs. N. S. Davis, G. C. Paoli, J. P. Ross.

Censors—Drs. S. Wickersham, J. Reid, N. Loverin.

Committee on Sanitary Condition of City—Drs. I. Hatch, D. B. Trimble, T. P. Seeley.

Singular Case of Exophthalmos.

Dr. Holmes presented a male patient, 33 years of age, affected with a rare form of exophthalmos of the right eye, which supervened fifteen years ago upon a punctured wound of the left eye. This eye inflamed extensively, and in a few weeks became atrophied.

The right eye became inflamed and somewhat prominent. The exophthalmos soon presented the appearance observed in the eye at the present time. The protrusion seems to depend upon a partial paralysis of the recti and orbicularis muscles. It is so extensive that the patient can not close the lids; on pressing two fingers of each hand into the upper and lower portion of the orbit, the eye is easily, and without pain, forced almost completely out of orbit. Quite gentle pressure upon the lids causes the globe to recede to its normal position. There is no symptom of pulsation or of a tumor in the orbit. The patient's health has always been remarkably good, with no evidence of disease of the heart, or of the thyroid gland.

Long exposure of the anterior portion of the globe to the air has produced thickening of the conjunctiva, and also opacity of the cornea, the upper fourth of the latter, however, being simply nebulous.

There is scarcely any secretion from the lachrymal gland and conjunctiva. The motions of the globe are very limited, being more extensive upward and downward, than in any other direction. The oblique muscles seem to have almost wholly lost their power, since the rotation of the globe on its antero-posterior axis is scarcely perceptible.

An elastic suspensory bandage around the head, so placed

on the lower lid as to support the globe, not only partially covered the cornea, but also greatly reduced the irritation.

The patient has been practically blind for fifteen years. There is evidently some lesion of the optic nerve, or retina, since he could otherwise see the outlines of large figures through the upper border of the cornea more distinctly than he now does.

Polypoid Tumor of the Cornea.

Dr. Holmes also presented a large polypoid tumor, which he had removed from the centre of the cornea of a young woman, who had suffered two years from "granulated lids," and pannus of the right eye. The tumor was somewhat flattened by the pressure of the lids, and very movable, being attached to the cornea by a narrow peduncle. It was readily excised by means of a small pair of scissors, after it had been slightly elevated from the cornea by a pair of forceps. Two weeks after the operation, the eye bore well the usual astringent applications, which slowly improved the condition of the cornea.

The microscopic appearances of the tumor, as described by Drs. Hunt and Lyman, are similar to those of fibrous polypus, the fibrous elements being somewhat indistinct, but enclosing a large number of cells, resembling epithelial cells. In some portions of the tissue were numerous collections of fine granular substance, containing large, irregular, nucleated cells.

Large Polypus Nasi.

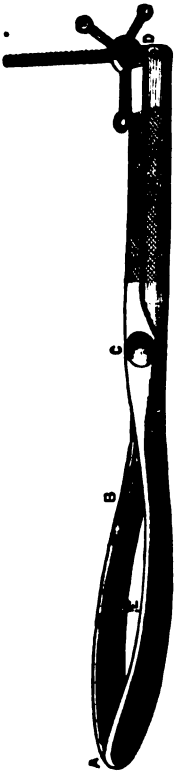
Dr. Bogue exhibited a remarkably large polypus, which he had removed from the nose of a boy twelve years of age. The tumor extended so far into the throat, that the act of coughing would force the pendulous portion forward nearly to the teeth. The attachment was very narrow, rendering the removal of the whole tumor exceedingly easy.

Cephalotribe.

Dr. Paoli presented a form of this instrument, which he

had devised, differing from that of Prof. Hodges in the following particulars: It is nearly a pound lighter; its blades, five inches shorter, their tips coming in contact with each other instead of being separated. The instrument is sufficiently strong to press out the contents of the head, and to retain so firm hold as to enable the obstetrician to draw down the fœtus without the necessity of changing instruments.

[The following is Dr. Paoli's description and cut of the instrument.—ED.]



It is an acknowledged fact, that of late years, on the continent of Europe, the Cephalotribe has been preferred to the old instruments, in performing embryotomy.

Many of the profession have had prejudices against the above instrument, on the grounds, that it was so heavy and clumsy, and that its use was attended with great difficulties.

In improvements on this valuable instrument, our distinguished American accoucheur, Professor Hodge, stands foremost. As an improvement on Professor Hodge's, I have constructed one (in consultation with our excellent German instrument maker, Degenhardt, here, in Chicago) which, as will be easily seen by the description, is not only lighter, and easier in its application, but also rotations of the fœtus' head can be performed in the smallest space of the pelvis.

The instrument being made of strong steel, well tempered, is capable, under the influence of the screw, to compress any fœtal head.

The whole weight of the instrument is two pounds and a half.

From A to B seven inches; from A to C, 11 inches; from

C to D, 8 inches. The width of the blade, one inch. Horizontal curve, one inch. The space between the blades of the widest part, when the instrument is closed, is only one inch.

Small Pox under Rare Circumstances.

Dr. Wickersham stated that he had lately successfully vaccinated a mulatto girl, aged nineteen, unmarried, but pregnant, who had just been exposed to small pox. She had never been vaccinated before. Four weeks after the vaccination, a well developed child was born, covered with pustules of about the eighth day. Other members of the society had examined the child, and pronounced the disease variola. The case terminated favorably.

Encephaloid Disease of Shoulder.

Dr. Seeley exhibited a portion of an encephaloid tumor, from the shoulder joint of a girl only nineteen years of age. The tumor involved the upper portion of the humerus, and the articular portion of the scapula, together with the soft portions of the arm and neck.

The growth passed through the various stages of slight swelling, ulceration, extensive fungus development, and caused the death of the patient in about two months from its first appearance.

Poisoning from Morphine.

Dr. Merriman related a case in which a man 35 years of age, suffering from delirium tremens, had been poisoned by taking very much larger and more frequent doses of morphine than his physician had prescribed. At the first visit the patient was found fully under the influence of the poison, the breathing being very slow and stertorous, pulse feeble and frequent, lips livid, skin moist, and deglutition impossible.

Electricity was found to be the only agent which produced any decided effect upon the patient. While this caused a very marked increase in the number of the respirations, and force of the pulse, for a short period, the patient finally succumbed in about five hours after the first visit.

PROGRESSIVE PARALYSIS OE THE INSANE.

(PARALYSIE GÉNÉRALE DES ALIÉNÉS OF THE FRENCH.)

BY A. W. BOSWORTH, M.A., PARIS, FRANCE.

Thesis for the Degree of M.D., Presented to the Faculty of the Rush Medical College, Chicago.

(*Continued from page* 299.)

In other cases the intellectual faculties appear to have been the more restored, while the impediment of speech very apparently remains. Then the patient, although he has again taken his accustomed place in society, plays his part in the worldly routine of life, for the time being, in a consistent manner; now asserts that all is well, yet, to the physician must he present a grave situation. The latter must be ready to counsel him and his friends; must be prepared for any medico-legal investigations, and rest assured that, if he has truly diagnosed the patient to have presented the characteristic symptoms of general palsy, the medical science of to-day requires him to know, that sooner or later there will be a relapse, and death will be the final, inevitable termination of the patient.

These remissions are of various length. Calmeil declares to have seen the malady thus remain absolutely stationary ten, fifteen, or twenty-four months. M. Marcé says that he has seen them prolonged eighteen months; one case more than two years, another more than five.

M. Marcé, to whom we are indebted for many of the ideas presented in this thesis, in his publication of "Mental Diseases," speaking of an abnormal termination of general palsy, says, "We see patients having presented ambitious delirium, impediment of speech, and all the symptoms of general palsy, remain in a state of dementia, while still preserving isolated, ambitious ideas, but offering a complete arrestation in the development of the troubles of motility. Life then may be indefinitely prolonged, as in chronic mania, or in simple dementia. I have at this moment (1862) two patients who present,

one since six years, the other since eight years, this singular transformation. Let us say concerning the subject, to explain my belief in regard to it, that these two patients had to the greatest degree, taken alcoholic drink to an excess, and that I am disposed to regard the facts of this nature, not as veritable general palsy, but as cases of alcoholic dementia, associated with ambitious ideas and with transient troubles of motility only due to a special intoxication."

Another reason for the great variety of the duration of this disease is what has been considered by some authors as a complication of the malady; by others as a predisposing cause; by others as its first symptom; we mean, congestion.

All physicians admit that there are seen in the precursory period, or especially in the two last periods, congestions more or less intense. Many authors, with Bayle, consider the cerebral congestions as constant in general palsy. Their character is to be sudden. Most usually they are preceded or accompanied by change of character if occurring in the precursory period; but sometimes the malady begins with a violent congestion of an apoplectic or convulsive form; or such an attack has preceded the disease a few weeks or months; or such congestion may rapidly cause death at an advanced period.

Such being the case, it is necessary before giving the prognosis to be informed in regard to the character the congestion assumes with each patient.

Some authors give three degrees, or different forms of congestion; others eight; some six. With the latter we have found the following characteristics in the book of M. Marcé, who thus enumerates them: "first degree, slight, with excitation; second degree, maniacal; third degree, comatose; fourth degree, hemiplegic; fifth degree, convulsive, apoplectiform; sixth degree, irregular form." In the first form there is a simple increase of the circulation, evident from acceleration of the pulse, redness of the face, intellectual and physical excitement; augmentation in the impediment of speech, and trouble of motility, if these latter are already manifest. This attack may last from a few hours to two or three days.

The second form differs from the first only by being more intense, and causing the patient to be violent and maniacal.

In the third form, somnolence, redness of the face, physical and intellectual weakness; the comatose state advancing to insensibility, finally terminating by aggravation or amelioration of the symptoms.

The fourth form, suddenly appearing, may throw the patient into some ordinary state of hemplegia for a few hours or days, and usually disappears mostly, but leaves the patient in an aggravated condition.

The fifth is really apoplectiform, or convulsive, and is the most dangerous; often the most frequent, immediately throwing its victim into a state insensible to all excitants, in which condition he may immediately expire; or later, be seized with general or partial convulsions, as in epilepsy. The attacks of this form may be quite numerous in the course of twenty-four hours, being separated by more or less complete coma. In some cases the muscular fibres are, as it were, continually contracted in a spasmodic manner for hours. These attacks, if occurring at five or six different periods of the year, soon produce death. If not speedily mortal, they disorganize more or less the nervous elements, leaving more or less accentuated contractions of various parts, and perceptibly diminishing the sensibility. These attacks often so closely resemble those of epilepsy, that naught but the antecedents of the patients, the duration of the coma, being prolonged sometimes for hours or days, and the repeated succession of the attacks, give them their true nature.

It has been observed that some patients can support thirty or forty of these epileptiform attacks without appearing to be greatly enfeebled, when suddenly another may come, and leave them a corpse.

The sixth form offers a mixture of all the preceding, which may alternate with the same patient. As congestions are so liable to occur during the march of general palsy, the attention of the physician should ever be on the alert, endeavoring to remove all that may tend to favor their apparition; and he

should remember that although they usually present the symptoms of a greatly increased circulation, yet they may assume a syncopal form.

Causes.

They have been divided into predisposing and occasional. This is the division that has been adopted by all authors who have treated of mental diseases. It is probable that all the causes given for madness may be applied to general palsy, but I shall especially insist on those which have an intimate relation with this disease.

Mr. Parchappe divides them into moral and psychical.

Mr. Baillarger classes among the predisposing causes, hereditability, temperament, age, professions, climate, and seasons.

Among the occasional, cerebral congestions, sanguinary suppressions, excesses in drinking. We shall follow this division, and also add that of onanism, venereal excess, and refer to syphilis and pellagra, which are given by some authors.

Predisposing Causes.

Hereditability.—Inheritance of disease is only a particular form of general heredity, a too frequent result of that invariable law which causes anatomical elements to have the property of directly giving birth to like elements.

At the first thought it would seem that statistics should be the only positive basis to mathematically establish the greater or less frequence of disease, and especially of the cause we are now treating; yet if we glance over the statistical tables of various authors, we are perplexed by finding that results are as various as opinions. These differences, however, are readily explained by the variable bases that have been adopted to establish the statistics.

(*To be continued.*)

EDITORIAL.

Apologetic.

The present number of the JOURNAL is delayed a few days in expectation of being able to send out with it the Annual Announcement of Rush Medical College. Circumstances, however, rendered it necessary to put that over until the 1st of June number, which will be issued several days in advance of its date.

Students' Number.

Under date of June 1st, we shall issue a Students' number of the JOURNAL. Of that number we shall send out *twelve thousand* copies. Aside from the Announcement, it will contain foreign and domestic correspondence, with several communications of great interest. The forms will be stereotyped, and we shall send as many more as we can obtain names to address. All our friends will oblige us by sending names of physicians, medical students and druggists.

Variety.

Hereafter the JOURNAL will contain a variety which heretofore the length of several elaborate articles published has prevented. The exhaustive thesis of Dr. Bosworth will be completed in the number for June 15th. We do not hesitate to say that it alone is worth the annual subscription to the JOURNAL.

Communications on File.

H. Webster Jones, M.D., Observations on Treatment of Sterility.

A. J. Miller, M.D., Shoulder Presentations.

E. R. Travers, M.D., " "

T. R. Wagoner, M.D., " "

N. Teall, M.D., " "

L. T. Strother, M.D., Extra Uterine Fœtation.
Wm. L. Coe, M.D., Mistaken Diagnosis.
A. Catron, M.D., Cerebro Spinal Meningitis.
H. D. Garrison, Fluid Extracts.
H. Wanzer, M.D., Placenta Prævia.
A. J. Baxter, M.D., Calabar Bean in Tetanus.
Cook County Hospital, Albuminuria Mitral Insufficiency.
T. O. Edwards, M.D., "Nothing new under the Sun."
Walter Hay, M.D., Translations of papers read before the Royal Academy, Paris, continued. Also a large number of miscellaneous papers which the Editor has not yet had time to look over.

Blood Corpuscles.

The beautiful and suggestive discovery, by Prof. Freer, described in the first article of this JOURNAL, will attract large attention. We are able to confirm his observations by personal investigation. His improved method gives results of the most remarkable character in conditions of the blood varied by disease.

Medical Education.

Our friends of the Cincinnati *Lancet and Observer*, furnish the profession an article on this somewhat hackneyed subject which we shall not scruple to transfer to our pages, *bodily*, so soon as space will permit. The Apostle therein takes the new (public) *role* of the "Phantom in Black." Unhappily our copy of the *Lancet* was borrowed by a friend, who failed to return it in season for insertion of the article in the present number of the Chicago Medical Journal. Meanwhile we endorse its sentiments *ad unguem*.

It is Queer

That medical gentlemen do not all of them see that medical science is developing mainly by *excision* not by *accretion*. That notably the most ignorant men who have, *ex gratia*, secured the diploma of M.D., are the most concerned about the *status* of the profession.

Many years ago we were impressed with the truth of a proposition by Dr. Wayland, of Brown University: "Let your *character* take care of your *reputation*."

Legal enactments — the verdicts of juries and the *dicta* of big-wigged judges — are not worth, to the profession, the powder to blow them to Gehenna. If you wish to be respected, *be* respected. *Hoc opus, hic labor est!*

Brother Haller — *Vandal-ia* like, wishes this to be accomplished by resolution. He wishes (perhaps under the stimulus of an honorary degree conferred by the APOSTLE) to have this done by a jury of inquest to be appointed by some dirty politician, accidentally governor.

In our observation the most ignorant men clamor loudest for "Medical Reform." Educated medical gentlemen scorn the splints and braces of temporary political demogogues.

Witness Michigan, with its *big* Medical College, gone to hopeless ruin under the domination of political hacks.

A man, intimately connected with the sewerage of Chicago, started a Medical College. To-day, because respectable medical gentlemen are educated to believe that respectability is the offspring of real worth, they are denounced in the circles of petty intrigue as unworthy of trust. The rattlesnakes lie in wait for them, slimy and secret, but *educated* medical men know that their fangs have been removed. We repeat, to-day, medical men stand highest, not by legal enactments — not by trades-union devices — not by pitiful advertising schemes, but by real merit, by high attainment.

Let the Apostle continue his jeremiads, and his disciples imagine a vain thing — the profession to-day is respected because it is RESPECTABLE.

Will the State Medical Society enact impotence into virility? If so, let it understand that there is still truth in the old maxim *ex nihilo, nihil fit.*

The following gentlemen have been acting in coöperation with members of the Faculty of Rush Medical College, as

Lecturers and Instructors

during the Spring Course and series of instruction in the interim of the Annual Sessions the preceding year:

WELLS R. MARSH, M.D., *Princ. and Prac. Med. and Dispensary Physician*, 59 W. Randolph Street.

JOHN E. OWENS, M.D., *Surgery and Venereal Diseases*, St. Luke's Hospital and 112 Randolph Street.

WM. C. LYMAN, M.D., *Surgery and Surgical Diagnosis*, U. S. Marine Hospital, cor. Wabash Avenue and Washington Street.

CURTIS T. FENN, M.D., *Obstetrics, etc.*, Cook County Hospital.

CHARLES T. PARKES, M.D., *Anatomy, etc.*, 43 N. Clark Street.

WM. C. HUNT, M.D., *Microscopy and Histology*, College.

I. N. DANFORTH, M.D., *Chemistry, etc.*, 43 S. Clark Street.

American Medical Association.

This body convened at Washington a few days since and elected W. A. Balwin, of Alabama, President, and Caspar Wistar, of Philadelphia, Secretary. Our Reporter, expecting to be present, was not, and the details of proceedings have not yet come to hand. We are melancholy, but not without hope.

When medical societies are conducted as scientific associations, and not to bolster up hopelessly decayed apostles of Medical Reform, we shall take interest enough in them to be present either personally or by representative.

But speaking of Medical Reform, Why do not Prof. Gross and his *confreres* carry out into actual practice their "Teachers' Convention" programmes? Or are their resolutions only a tub thrown to the Apostolic whale? The JOURNAL pauses for a reply.

Since the above was written, the Boston *Medical Journal* has come to hand, from which we extract:

MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

Our national medical society has just held its annual meeting. Socially a success, it can hardly be considered so as a scientific re-union. Nor can we ever reasonably expect it to be otherwise. Its influence in removing sectional prejudices, in familiarizing the physicians of one part of our extended country with other parts, and with their professional brethren, is both

great and salutary. It is, however, too widely extended, and holds too infrequent and too brief meetings to render its scientific proceedings choice or valuable. The great majority of our physicians are too busy in solving the practical problems of life and death daily presented to them, or too much occupied in the pursuit of individual aggrandizement and reputation, to become *savants*, or to devote themselves to the cultivation of pure science. It is a pity, too, that those unqualified to speak instructively, and those who delight in parliamentary quibbles, are allowed to take up the valuable time of a three days' annual session. Such, however, is the fate of many other large societies. The International Medical Congress in Paris was a signal instance of a like failure. The efforts of the National Association to raise the standard of medical requirements can not be too highly praised; and it is by this means only that the Society itself can ever become worthy of representing the whole nation.

The annual meeting was held at Washington, commencing on the morning of Tuesday, 6th inst., and adjourned on Friday, the 8th. After an address of welcome by Dr. Tyler, of Washington, the annual address was delivered by the President, Dr. S. D. Gross, of Philadelphia. The report of the Committee on Medical Education was ordered to be printed. The Committee on the President's Address reported several resolutions to carry out suggestions made in it, which were adopted. A resolution to establish nurse-training institutions in all large cities was referred to a special committee. The Committee on altering the Constitution advised many changes with regard to admission of members, etc. Some discussion was elicited by a resolution offered by the Committee on Medical Ethics, formally endorsing consultations with female practitioners who had received a regular medical education, and the subject was indefinitely postponed. Reports of various other committees were made and accepted.

W. A. Baldwin, of Alabama, was elected President; G. Mendenhall, Ohio; Noble Young, Washington; N. P. Munroe, Maine; and S. M. Bemis, Louisiana, Vice-Presidents; Casper Wistar, Philadelphia, Treasurer; and A. G. Semmes, Secretary for the ensuing year. New Orleans was appointed as the next place of meeting.

A number of committees were appointed, and it was "*Resolved*, that those gentlemen who wish to report on special subjects, and

will pledge themselves to report at the next meeting, be requested to send their names and the subject they desire to report upon to the Secretary."

While in Washington, the delegates and members were received by the President, Chief Justice Chase, Speaker Colfax, and Senator Morgan, and on Wednesday evening the Army Medical Museum was thrown open for their inspection. After the adjournment on Friday, a large number of the members visited Mt. Vernon.

PUBLISHER'S NOTICES.

THE MAILS.—Great pains have been taken to have the JOURNAL regularly and promptly sent to each subscriber. Those who fail to receive it regularly will confer a favor by advising us of the fact, and those who have failed to receive any of the back numbers, can secure them by addressing this office.

BACK NUMBERS.—A very few numbers of the JOURNAL, for January 15, 1868, are needed at this office. For all those received before June 15, we will allow the sum of twenty-five cents each on account.

TO CORRESPONDENTS.—Daily letters are received at the office of the JOURNAL, asking for information with regard to various subjects for the writer. Will those who address us in this manner, asking for a written reply, remember to inclose a stamp for postage? Hereafter, we can not undertake to reply to those who do not comply with this regulation.

During the coming month those of our subscribers who have not received a statement of the amount of their indebtedness to the JOURNAL, will have been so notified — some of them for the second time. We can not again notify those who are delinquent. Will not those subscribers who have suffered the back dues to accumulate, make a strenuous effort and square their accounts on our books? The JOURNAL has undergone a heavy expense in changing form and style. Other improvements are being projected, which, completed, will place it in the foremost rank of the medical publications of the day. We have resolved to supply the profession in the West with a periodical whose pages shall reflect the progress that is constantly taking place in the science and its practice. These improvements all cost money, and it is imperatively necessary for those who are in debt to us to pay up promptly. Without the support and encouragement of our subscribers, we can not successfully conduct a publication to which we give our time and our efforts to the end that it may be interesting and instructive to them. We are certain that having said thus much, our readers will feel it both a duty and pleasure to respond with promptness to this our last call.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—JUNE 1, 1868.—*No.* 11.

FOREIGN CORRESPONDENCE.

PARIS, March 27th, 1868.

THE Academy of Medicine, at its last sitting, elected Dr. Davaine as member in the place of the late Dr. Trousseau. Dr. Davaine is one of the attending physicians at the Palace of the Tuilleries. M. Reiset has published an article on the *Respiration of Cattle*, giving an account of certain experiments of his to ascertain the effect of change of food on the nature of the breath emitted. From these experiments it appears that calves feeding on good grass exhale more nitrogen, and a normal quantity of proto-carburetted hydrogen; the latter at the rate of four-thirds of a litre, and the former at the rate of six grammes and seven-tenths per hour. Calves, on the contrary, exclusively fed on milky substances, and deprived of vegetable food, exhale gaseous substances analogous to those exhaled by carnivora. The quantity of proto-carburetted hydrogen is, then, next to nothing, and M. Reiset is of opinion that this gas is produced only by vegetable food, when in a state of fermentation and elaboration in the first stomach of ruminants fed in the common way. On the other hand, in the case of an exclusively milky diet, the exhalation of nitrogen is also very considerable,

and nearly double what it is under the influence of vegetable diet. On French farms it is the custom to feed calves that are to be fattened with milk or curd mixed up with a certain quantity of well boiled rice. This hydro-carburetted substance, added to the other food, affords respiration materials that are easily consumed, and thus moderate the destruction of plastic matter, rich in nitrogen. Hence the produce of respiration depends much more on the nature of the food administered, than on the species of animal. M. Reiset also makes some remarks on the disease called the *butts*, which often occurs when cattle have eaten too greedily of clover. Some two or three hundred head of cattle may thus, in the course of half an hour, be all at once exposed to certain death. In such cases, M. Reiset recommends the quick absorbtion of the carbonic acid, which is almost exclusively the cause of the affection, by means of calcined magnesia, or else saccharite of lime.

The question of the purity of the water we drink has long attracted the attention of hygienists, and not without reason, since it is now proved that the most fearful epidemics may have no other origin than that of putrescent organic matter suspended or dissolved in the water used for culinary purposes or drink. M. Bellamy devotes an article in the *Journal des Connoissances Medicales* to the important subject, and proposes the sub-sulphate alumina as a proper test for water. The organic particles contained in the liquid are, he informs us, of the same nature as what is generally termed *humus*, or the active matter of garden-mould. They are incapable of crystalization, are of very indefinite composition, more or less of a brown color, and capable of forming, with albumen, certain insoluble lakes, which, by their depth of hue, may serve to denote the quantity of organic matter contained in a given kind of water. Alum has been used as a test, but unless the liquid be very impure that salt is not readily decomposed, and the sub-sulphate of alumina is preferable. It may be prepared by adding 12 cubic centimètres of a solution of caustic potash, of the strength of 10 per cent., to a solution of 8 grammes of alum in 100 of water. A precipitate is thus formed, which is slowly re-dissolved, and

the solution will keep indefinitely in a limpid state. This subsulphate contains about half as much more potash than alum, which is a double salt. Of this solution, four cubic centimètres are poured into a litre of the water, to be tested. The decomposition of the salt takes place under the triple influence of the mass of water, the earthy bicarbonates, and organic matter contained in it. The latter falls to the bottom of the vessel in the course of a few hours, being precipitated by the alumina, which combines with it. It is true that all the organic matter contained in the water will not be precipitated in this way, on account of the many elements of which it is composed, and a few of which may remain in suspension; but those derived from sewers will chiefly be fastened upon by the alumina, and it is to these the colored particles mainly belong. It must be kept in mind that this prepared method is not intended for a quantitative analysis, but merely as an easy way of detecting the foulness of water in a very short time.

M. Becquerel has published a paper on electro-capillary phenomena. Having previously shown that when a slip of filtering paper is placed between two glass plates, in order to effect the slow efflux of a metalic solution contained in a vessel dipping into another solution, the electro-capillary action is rendered more easy. The author illustrates this fact by a variety of experiments. Thus, if moist persulphuret of iron be deposited on a copper lamina placed between two glass ones, and if the borders be covered with putty to prevent the entrance of atmospheric air, the sulphuret of iron will be gradually decomposed, sulphuret of copper will be formed, and iron in a metallic state will be deposited here and there, and this effect is attributable to electro-capillary action.

M. Schlœsing has communicated to the Academy of Science the result of his researches on the origin of the nitrous gas which is evolved during the fermentation of the juice of the beet root. This nitrous gas he shows to be due to the reduction of the nitrates contained in vegetable juices. One of his predecessors at the laboratory of the Tobacco Manufactory, M. Rey had proved that tobacco juice left to putrefy in a close

vessel, evolved protoxide of nitrogen; this gas was diluted with carbonic acid, and its proportion varied according to the quality of the tobacco. M. Schlœsing, acting upon the hint, has instituted experiments, from which it appears that the nitrates contained in the juice are decomposed during putrefaction, and rapidly enough to allow of daily analysis of the produce. In a vegetable juice containing nitrates, the gas evolved leaves behind, after the absorption of its carbonic acid, a residue inclosing protoxide of nitrogen, a substance which will not be found in the residue unless the juice contained nitrates, and, agreeably to this, during the putrefaction of tobacco juice, there is a connexion between the destruction of the nitrates and the generation of the protoxide, nor does one of the phenomena take place without the other. One author has extended his experiments to other substances. Thus, sugar and water, during the lactic fermentation, will evolve nothing but carbonic acid and hydrogen; but if nitrate of potash be put in, the result will be a mixture of carbonic acid, nitrogen and protoxide and binoxide of nitrogen. Fresh leaves and roots, left exposed to the open air, in dilute solutions of some nitrate, were found to decompose nitric acid when the smell of liquids betrayed the commencement of putrefaction.

In an essay on the sub-nitrate of bismuth, Dr. Monneret enumerates the various effects of this valuable medicine. He affirms he was the first to employ it in nose-bleeding and intestinal hæmmorrhage, in which latter case he administers a teaspoonful of it in two table-spoonfuls of water once an hour. He has used it in typhus fever for the last five years, and never, during that time, has he lost a single patient by intestinal hæmmorrhage. The same salt appears to be a specific for the cure of ozæna and otorrhœa. Sub-nitrate of bismuth, in his opinion, only acts negatively, and merely as an insulating agent, but it prepares the mucous membrane for the prompt absorbtion of remedies, the action of which is uncertain.

The *Moniteur* relates a case of poisoning by mushrooms, from which it would appear that this dangerous cryptogamous plant is capable of causing temporary madness. This was observed

a few days ago in the case of two young men who had been gathering mushrooms in the forest of Marchiennes, and who cooked them without taking any of the ordinary precautions. The consequence was that they were seized with a violent attack of madness, and were with difficulty brought home to their family, where they recovered their senses after proper medical treatment.

Dr. Piorry, who has been seriously ill for some time past, is now quite recovered, and has resumed his clinical lectures.

W.

PHILADELPHIA CORRESPONDENCE.

PHILADELPHIA, May 9, 1868.

Chicago Medical Journal:

R. J., aged 40, colored, *Epulis*, tumor inside of mouth, connected with lower jaw bone, situated in front. Two incisions were made, and the teeth of lower jaw in front removed. Lower lip was separated from the gum as far down as the alveolæ. The portion of bone to which the tumour was attached was now removed. Parts brought together with interrupted suture. Wash of carbolic acid gr.x to ℥ i. water used as dressing. Nine days after patient presented herself cured.

J. P., aged 35. Apparent dislocation of the forearm backwards, with fracture of the external condyle. The limb was in an extended position, and of but little use to the patient. Three months since he had a fall and this is the result. Chloroform was administered. The olecranon was found to project considerably back of the posterior surface of the humerus. An incision one-fourth of an inch was made over the olecranon process, and a drill introduced. With this the olecranon was fractured, and the arm bent at an acute angle across the breast. The wound was closed with twisted suture and collodion. A wire splint placed at proper angle was now adjusted, and the patient placed in the college hospital, where he constantly and steadily improved, until now he is very nearly well.

S. W., aged 31. Neuralgia in the popliteal space; the peroneal nerve being the one affected. Has been under constant treatment for fourteen months, but has no relief. An incision was made, and a small portion of the nerve was removed. This gave almost immediate relief, and the patient has been removed cured.

D. K., aged 3 *months.* Congenital club foot. Heels drawn up very high, and both feet turned in. Chloroform administered and the tendo achillis divided three-fourths of an inch above the os calcis. The foot was then forcibly extended. Not a drop of blood flowed, and the patient was discharged. One week afterwards she was brought to clinic, and the feet were in excellent position, and no untoward symptom had followed the operation.

P. W., aged 22. Last April, four years ago, he was ill for three weeks with an attack of pleurisy. At that time pus formed and opened externally below the scapula, about four inches in front of the spinal column, which, by ulcerative action, has extended outward and downward until now he has a sinus on the left side of the chest nine inches in length, and between the sixth and seventh rib, communicates with the cavity of the chest. A silver tube was introduced and pus drained off. Directed that the wound should be daily washed with a solution of permanganate of potash. Necrosis of the fifth and part of the sixth ribs. The fifth rib was removed entirely on the left side, and the sixth rib was scraped. The left lung was wholly collapsed. Yours, E. K. H.

OBSERVATIONS IN THE TREATMENT OF STERILITY.

BY H. WEBSTER JONES, M.D.

Editor Chicago Journal:

Opportunities for the study of the causes and cure of sterility are so infrequent in these days, when men and women fashionably ignore the Creator's purpose in uniting

them, that one is actually startled by a request for advice by which to further reproduction.

Such requests, quite recent, have led me to review the experience of a few years, and to present its results, as a disciple rather than teacher, to the readers of your journal.

In 1864 I was consulted by a lady, of perhaps thirty years, married and the mother of three children, the youngest of whom was then ten years of age. She was the subject of intense orbital neuralgia, of so peculiar a character as to demand the most careful investigation of the whole system, with reference to its ætiology. It was discovered that albuminuria was present to an alarming extent, and that the sufferings of the patient were enhanced by a retroversion of the uterus, supposed to have originated at the time of her last confinement. She had not conceived, to her knowledge, for ten years, though constantly in the society of her husband.

Among other attempts to relieve Mrs. H., I elevated the uterus upon the closed-bar lever pessary of Professor Hodge. Hitherto regular in menstruation, she became alarmed at the postponement of the very next expected period; was soon attended by all all her usual signs of pregnancy, with aggravation of her kidney disease, and much suffering from neuralgia, and finally aborted at three months, *involuntarily.*

I omit much of the interesting details of this case, remarking the chronic element in the albuminuria; the tolerably uniform recurrence of the neuralgia at monthly intervals, accompanied with well-marked *arcus senilis*, and lessening visual power; the reposition of the retroverted womb, followed immediately by pregnancy, the involuntary abortion, and last, the continuance of life and energy to the present date.

The patient always attributed her conception to the instrument used in elevating the womb, and objected to its reinsertion, averring her willingness to forego the relief and freedom of motion to which it for a time conduced, rather than to risk another pregnancy.

About the same time, I removed a pessary which had been worn by another patient, as one of a series, for the cure of

retroversion, vaginal contraction, and vaginismus, following a protracted first labor, antedating about seven years. She assured me that connection with her husband had not taken place during the entire course of treatment, which occupied eight months. At the conclusion of this period, the uterus was nearly normal in its position, the vagina much elongated, and the vaginal hyperæsthesia subdued to a great extent. A single menstruation followed, when the patient discovered herself pregnant, and was duly delivered at term.

In the spring of 1865, Mrs. G., æt. twenty-three, having lost an only child of four years, consulted me with a view to the removal of her apparently sterile condition.

She had, unconsciously, a complete retroversion. It was treated mechanically, as in the first cases, and pregnancy followed the third menstruation after the instrument was introduced.

A year since, a friend consulted me upon his wife's health, and her prospect for child-bearing. She was thirty years of age, had never been rugged, and was never pregnant though married seven years. She had, a year previous, been quite ill, while away from home, I suppose with pelvic abscess, which finally found vent through the rectum. Her convalescence was tedious, accompanied by frequent hæmorrhages from the rectum, and her menses were dysmenhorrœic, exhausting and profuse.

She was "too weak to walk, or drive, or even stand for more than a few minutes at a time."

The womb was found prolapsed, resting persistently upon the rectum, which was swollen and tender, and the vagina was shortened by anterior displacement of the uterine axis.

Coition was said to be painful, from a sense of obstruction, and "every thing ran out," upon the conclusion of the marital embrace.

The womb was at once supported, and carried backward by a pessary (always Hodge's), astringent enemas ordered, and gentle exercise, to be followed by rest in recumbency enjoined.

At the completion of six months, the invalidism was overcome; the patient could walk, drive, stand "as well as ever," and the hæmorrhoids were rarely troublesome.

I removed the pessary, leaving the uterus well retired in the pelvis, and the vagina of normal dimensions. Pregnancy followed the second menstruation thereafter, and is now well advanced.

More recent investigations convince me of the truth of J. Marion Sims' position upon the inhibitory effect of uterine displacements in sterility. In three quite recent cases, the patients agree in relation to the difficulty of retaining the male discharges after coition. In each I find the uterus acting as a piston in a force pump, ejecting the vaginal contents immediately upon the withdrawal of the distending member.

Selecting the related cases because they are typical, little being done for them beside the mechanical aid mentioned, I purposely omit many others of doubtful origin, that I may suggest, if not prove, the relation of cause and effect between the anatomical fault and the co-existing sterility, inclining my readers as I hope, *pari passu*, to a candid investigation of the practical value of the curative means proposed.

As a summary, let me express a conviction of the usefulness of Hodge's closed-bar lever pessary, in the treatment of all such cases as are complicated by an obstructive anatomical arrangement of the pelvic organs, and more especially, whenever it is found that the piston-like descent of the uterus, and the spasmodic contraction of the distal vaginal walls forbid the retention of semen.

49 *S. Ada Street, May 12th*, 1868.

EXTRA-UTERINE FŒTATION.

BY L. T. STROTHER, M.D., DAYTON, INDIANA.

I SUBMIT the following statement of facts, which have recently come under the observation of myself and others, in relation to a very extraordinary case of extra-uterine fœtation,

as it occurred in the case of Mrs. P., aged thirty-five, the mother of four children, the youngest of which is seven years old.

On the 5th of February, 1868, my worthy preceptor and friend, Dr. D. H. Crouse, was called to attend Mrs. P. in labor. The doctor obeyed the summons, supposing it nothing more than an ordinary case of accouchement. Upon his arrival, he found her experiencing pains marked by distinct intermittance, closely resembling the contractions of the uterus; but, on making an examination per vaginam, it was with very great difficulty the os tincæ could be found, as a roundish and soft mass on the left, and posteriorily, pressed the left wall of the vagina over against the right, so contracting and diminishing the vagina as to almost exclude the canal. The os was found to be slightly enlarged, with no shortening of the neck, no dilatation or softening. Upon passing his hands over the abdomen, he found the parietes to correspond to their state in a woman far advanced in pregnancy, but he immediately discovered a strange anomalism of nature—viz., two distinct tumors occupying the abdominal cavity, one quite small and hard, on the right of the linea alba, and pressed down in the right inguinal region; on the left he found a large growth filling up the whole of that side of the abdomen, which felt hard on pressure. His attention was immediately called to the small tumor in the right side in his examination, by feeling it contract through the abdominal walls during each pain.

Consultation was requested, and Dr. M. Baker, of Stockwell, was sent for. Upon his arrival, a careful examination of the case was made. He found every thing to concur as described above in every particular. They then came to the following conclusions: that, in the common acceptation of the term, she was not pregnant; the small tumor on the right side, which they could feel contract, was the uterus, that it contained nothing—tumor, polypus, or fœtus; the large growth on the left side was evidently independent of the uterus, and whatever the character of the enlargement might

be, it was extra-uterine. The uterine region gave a dull sound on percussion, and there were distinct signs of fluctuation in the lower portion of the abdomen.

They then obtained from her the following history: Early in June of last year she commenced "losing blood," attended with much pain in the left side; was very much reduced and weakened by the loss of blood. A physician was called, who addressed himself to the rational treatment of the case, tonics and iron. Afterward she came under the care of different practitioners; one of which examined, pronounced and treated the case for polypoid tumor within the uterus. A "water doctor" in the meantime was called. He looked at the urine, examined her with the "touch" and speculum, and declared her pregnant. She had experienced certain signs and symptoms to lead her to suppose she was pregnant, and at this time she believed herself to be so. She did not feel at any time as during her former pregnancies; had occasional discharges at irregular intervals from the vagina during the whole period; pain was constant, and became greater as her size increased; bowels obstinately constipated all the time; breasts contained milk for some time. The doctors informed her she would not be delivered of a child; her case was a hopeless one, she could expect nothing but death, and that soon. She was very much emaciated, and at that late hour it would be impossible for her to survive an operation. They prescribed some anodyne to be taken at intervals, promising to give her all the relief in their power while she lasted. They were confident, and so expressed to her husband that her disease was either ovarian or extra-uterine pregnancy, and if the latter, the child was now dead. From that day to the day of her dissolution she had almost incessant vomiting, and complained of a burning pain at the epigastrium.

In the afternoon of the Wednesday following, February 12th, while reclining in an arm chair, she suddenly felt something give way, which was speedily followed by depression. A physician was called, who found a very slight discharge from the vagina, of a bloody, dark appearance. She was

sinking fast, and he was of the opinion that she would not outlive the night. She died at nine o'clock that evening. A *post mortem* was immediately requested, but the husband would not give his consent, till, on Friday the 14th, thirty-eight hours after death, Drs. Baker, Crouse, Washburn, and myself were present; Dr. Baker conducting the autopsy, which was not held till after the funeral had been preached, and the people waiting outside presented obstacles that materially interfered to prevent a sufficiently minute and thorough examination of the *post-mortem* appearances from being obtained. A section was made in the median line, extending from the ensiform cartilage to the pubes, also a transverse incision was made an inch below the umbilicus; the integument and walls of the abdomen were carefully dissected and reflected; no marks of inflammation found. When the peritoneum was opened, we found the cavity filled with a fluid of a dark grumous appearance. The uterus was found pressed down, and over on the right side it was slightly hypertrophied, contained a small clot of blood; its walls were not thickened worthy to mention; the lining membrane was not congested. The os uteri was undilated, was not shortened; the right Fallopian tube and ovary were normal in character. We found a large tumor enveloped in a cyst occupying nearly the whole of the abdomen, and attached to almost all of the abdominal viscera. The omentum and a trace of the spleen formed the anterior coverings of the cyst; they were so strongly attached to it, and changed in appearance, that at first we did not recognize them. There were extensive adhesions existing between the appendix vermiformis, most of the ascending colon, and the cyst; the descending colon, loaded with fœcal matter, was enveloped in the cyst; portions of the ileum, jejunum, mesentery, part of the transverse colon and left lobe of the liver were attached by adhesions that could not be broken up to the posterior and superior part of the cyst. Upon opening the cyst, the body of a full-grown male fœtus was exposed, lying obliquely under the omentum, its head toward the right and above the umbilicus. The

fœtus was large and well developed; seemed to be normal in every respect except the head, which was very large, the bones of which were softened. The funis was severed, child removed, blood sponged out of the sac. On following the cord, the placenta was found attached to the under side of the diaphragm, down over the spinal column and left kidney, the lower end resting in the left iliac fossa, very curious and abnormal in appearance, oblong in shape. The cord was of usual length, and once round the neck of the child. All present agreed, as a low figure, that the child would weigh seven pounds. No trace of the left Fallopian tube or ovary could be found, these organs having been entirely obliterated in the formation of the cyst. The spleen, as an organ, was not found.

I have presented this case, thinking it might be of interest to the profession, as such cases are rare in common practice; but this case is rendered more so in view of the attending circumstances. Here the child certainly lived to the full term, while the rule in this variety of gestation is, it seldom passes beyond the fifth month. From the fluid found in the abdomen of this woman, she evidently died of rupture of the sac and hæmorrhage. There were no marks of peritonitis. This was a well marked case of the abdominal species of extra-uterine pregnancy.

Whatever may have been advisable at an earlier period of this case, no one will say, I think, that an operation such as the case would have demanded should have been attempted, or was justifiable, under the circumstances found existing at the time, or after Drs. Crouse and Baker visited her.

INNOVATION.—"To play with important truths; to disturb the repose of established tenets; to subtilize objections and elude proofs, is too often the sport of youthful vanity, of which maturer experience commonly repents."

"One new change leaves always (as in building) a toothing or aptitude for another."

"It were good that men in their innovations would follow the example of Time itself, which indeed innovateth greatly, but quietly, and by degrees scarcely to be perceived."

EDITORIAL.

WE surrender a considerable proportion of the present number of the JOURNAL to the triennial catalogue and announcement of RUSH MEDICAL COLLEGE, as containing matter of permanent interest to the profession at large, in order to reach as large a number of readers as possible, TWELVE THOUSAND COPIES are to be issued, and, as the forms are stereotyped, as many more as we can find names to address. The attention of graduates of Rush Medical College is called to the published list of *alumni*, and if any mistakes are noticed, a favor will be conferred in pointing them out. Prior to the reorganization of the College, the books were kept with a disregard of order, and of a high standard of Medical Education somewhat wonderful to contemplate. Hereafter it is believed that errors will be few or none.

Old subscribers to this JOURNAL, will not need to be informed that the present editor will not deprive them of their due amount of reading matter by crowding upon it this time. The space will be returned them soon.

ITEMS, NEWS AND GOSSIP. The Regents of the University of Michigan have applied to the Supreme Court for a *mandamus* to compel the State Treasurer to pay over the *pottage* for which they recently sold the birthright of the Medical Department. Several of our exchanges are severe on Profs. Palmer, Douglass and Sager for the vulgar tenacity with which they adhere to the floating fragments of the former College at Ann Arbor. We sincerely trust that our *confreres* will forbear until it is ascertained why the American Medical Association happened to admit delegates from the present hybrid concern to their late meeting.—*Nous Verrons.*—The *Richmond Journal* has been removed to Louisville, Ky., the editor Dr. Gaillard, having been appointed to a professorial chair in that city. ——The State Medical Society of Ill., at its recent meeting, failed to pass the resolutions introduced by Dr. Haller last year, taking possession of the medical colleges in the West. It is understood the Apostle refuses to be comforted. Details of its doings next number.——Prof. Freer has returned to Europe for the summer. He will keep our readers duly posted on medical matters over the water.——Prof. Gunn has removed his office to the Medical College.——The homœopathists of the North-west censure their Michigan brethren for accepting an organization of their craft away from Ann Arbor.——It is understood that the proprietors of the recently seized vinegar factory in this city, and the Cleveland Homœopathic School have tendered the Regents of the University of Michigan a consolidation with the Ann Arbor concern. Hybrids are not prolific.

BOOK NOTICES.

RESEARCHES IN OBSTETRICS. By J. MATTHEWS DUNCAN, A.M., M.D., L. R. C. S. E., Lecturer in Surgeon's Hall [London] Medical School, etc., etc. New York: Wm. Wood & Co., 71 Walker street. 1868. Pp. 467. Wm. B. Keen & Co., 148 Lake street, Chicago.

This work is brought out in very superior style by the eminent publishing house whose imprint appears on the title page. The contents are mainly collected from the author's writings in various medical and scientific periodicals — the whole carefully revised or rewritten. A few are now for the first time in print. The student and practitioner will find in it a large amount of valuable information, and suggestions which can not be obtained in the usual systematic treatises on the subject.

FELIX VON NIEMEYER'S CLINICAL LECTURES ON PULMONARY PHTHISIS. Translated, by permission of the Author, from the Second German Edition, by J. L. PARKE. New York: Moorhead, Simpson & Bond. 1868. Pp. 116. From the Publisher.

A very valuable monograph, which, although we dissent from many of the views of the author, we commend to the perusal of our readers.

THE INDIGESTIONS; or Diseases of the Digestive Organs Functionally Treated. By THOMAS KING CHAMBERS, Honorary Physician — [But what is the necessity of saying or writing who CHAMBERS is?] Second American from the Second and Revised English Edition. Philadelphia: Henry C. Lea. 1868. Chicago: S. C. Griggs & Co.

The JOURNAL thinks no living writer on Practice of Medicine has done more for its real advancement than Thomas King Chambers. He has devoted attention to the "roots of the tree of life," and finds that they are best supplied by the elements of nutrition. Mere medication has very little to do with it. *O si sic omnes!* All medication at the present savors of empiricism, which does not refer constantly to nutrition. All physicians who wish to keep pace with the times should carefully peruse the writings of this eminent author.

ON DISEASES OF THE SKIN; A System of Cutaneous Medicine. By ERASMUS WILSON, F. R. S. Seventh American from the Sixth and Revised English Edition. With Twenty Plates and Illustrations on Wood. Philadelphia: Henry C. Lea. 1848. Pp. 808. Chicago: S. C. Griggs & Co.

It is with pleasure we chronicle a new edition of this, the best treatise on diseases of the skin extant.

RUSH MEDICAL COLLEGE,

CHICAGO.

Annual Announcement and Circular for 1868-9.

THE Introductory Lecture to the Twenty-Sixth Annual Course will be given in the lower lecture-room of the College, on Wednesday Evening, September 30th, by PROFESSOR POWELL, and the regular lectures will commence on the following morning, and continue eighteen weeks.

The control of the College is vested in the following:

Board of Trustees.

HON. W. B. OGDEN, - - - - - PRESIDENT.
HON. GRANT GOODRICH, - - - SECRETARY.
HON. MARK SKINNER, - - - - TREASURER.

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EPHRAIM INGALS, M.D.

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HON. FRANKLIN CORWIN, *Speaker H. R.* } *Ex-Officio.*
JAMES V. Z. BLANEY, M.D., *Pres. College.*

Faculty.

J. V. Z. BLANEY, A.M., M.D., PRESIDENT,
Prof. of Chemistry and Pharmacy, 45 Clark Street.
JOS. W. FREER, M.D.,
Prof. of Physiology and Microscopic Anatomy, College.
J. ADAMS ALLEN, M.D., LL.D.,
Prof. of Principles and Practice of Medicine, 71 Dearborn Street.
E. INGALS, M.D., TREASURER,
Prof. of Materia Medica and Medical Jurisprudence, 190 Clark Street.
DELASKIE MILLER, M.D., SECRETARY,
Prof. of Obstetrics and Diseases of Women and Children, 518 Wabash Ave.
R. L. REA, M.D.
Prof. of Anatomy, 119 Clark Street.
MOSES GUNN, A.M., M.D.,
Prof. of Principles and Practice of Surgery and Clinical Surgery, College.
EDWIN POWELL, M.D.,
Prof. Military Surgery and Surgical Anatomy, 45 Clark Street.
JOSEPH P. ROSS, M.D.,
Prof. Clinical Medicine and Diseases of the Chest, 85 Washington St.
EDWIN L. HOLMES, M.D.,
Lecturer on Diseases of the Eye and Ear, 169 Dearborn Street.
CHARLES T. PARKES, M.D.,
Demonstrator, 43 North Clark Street.
WILLIAM LITTLE, M.D.,
Curator of the Museum and Prosector of Surgery, College.

CHARLES KEIL, *Janitor*, at the College.

College Building.

The College building, situated on the corner of Dearborn and Indiana Streets, contains two large Lecture-rooms, each having 625 numbered seats, a spacious Laboratory, Museum, and Dissecting-room,—the latter, thirty-eight by eighty feet in size, thoroughly ventilated, lighted by side and skylights, and abundantly supplied with gas and water, containing fifty tables, and private closets for the wardrobes, books and instruments of each class, is unquestionably unequaled for its purposes. The whole building is warmed by steam, by which a uniform and agreeable temperature is secured in all its parts. Several of the Faculty have their offices in the building, affording every requisite facility for students to secure such information as they may from time to time desire. The experience of the last session fully attests the perfect success of the appliances for both heating and ventilation. Not a single case of severe sickness occurred in the large class assembled. Contrasting this with the results of previous

years, it is clear that, aside from mere size, very important hygienic improvements have been secured in the new structure. The Faculty are fully sustained in the statement that the assembling class will be welcomed to the finest and most commodious Medical College building in the world.

All members of the profession are invited to call and survey the building and its advantages at any time.

Clinics.

The Clinical advantages of the College are ample and varied.

A daily clinic will be given at the Marine Hospital. Prof. GUND and Dr. E. C. ROGERS, Surgeon in Charge, will lecture upon Clinical Surgery, and Dr. WILLIAM C. LYMAN, (late Surgeon U.S.N., now Resident Physician of the Hospital,) upon Diseases of the Chest.

Four Clinics each week will be given at the County Hospital. It is a commodious building, containing about three hundred beds, and being attended by an able corps of Physicians and Surgeons, will, in addition to the Marine Hospital, the Chicago Eye and Ear Infirmary, and the College Dispensary, give very abundant clinical material for the observation of the class. During the year there were seventy-three autopsies at the County Hospital, which afforded to the class in attendance excellent opportunity for the study of morbid anatomy. The field for study of diseases of the chest, is probably not excelled in this country.

The connection of Profs. POWELL and Ross with the Hospital is sufficient guarantee that every facility will be extended to students to secure the highest advantage from Clinical teaching.

The Lecturer on Diseases of the Eye and Ear, in addition to his course at the College, will give Clinical instruction twice a week, at the Chicago Charitable Eye and Ear Infirmary, which has been enlarged and furnished with all the conveniences necessary for patients with diseases of these organs. Students will have an excellent opportunity of studying disease of the eye, and of witnessing many operations in ophthalmic surgery.

Saturday of each week will be devoted to surgical operations and Clinical instruction in the College, at which time indigent persons, who require advice or surgical operations, are attended gratuitously.

The advantages derived from these *cliniques* consist in the opportunity of witnessing a great variety of surgical operations and numerous medical cases, and the treatment proper for each.

Since the re-opening of the Dispensary at the College, the number of patients in daily attendance has largely increased, furnishing opportunities for observation unsurpassed in this country. As noted in another place, the importance of securing the best possible results from the abundant clinical material has been recognized by the Board of Trustees in the establishment of a new chair having especial supervision of this department, and intended to develop its advantages to the utmost.

Directions to Students.

Students will sign the Matriculation List, and obtain their tickets of the Treasurer, Prof. INGALS, at his office, 190 Clark Street; and to give opportunity for this, the office will be open from 8 o'clock A.M. to 5 o'clock P.M., on and after Monday, September 28th. Students may select their seats in the lecture rooms when they take their tickets. The Janitor may be seen at his residence in the College building, and will aid in obtaining boarding places, rooms, etc. For any special information, students may call on any member of the Faculty. For circular, address the Secretary, Prof. DELASKIE MILLER, 518 Wabash Avenue.

Graduation.

The following are the requirements for the Degree of Doctor of Medicine, viz.:

1st. The candidate must be twenty-one years of age, and give satisfactory evidence of possessing a good moral character.

2nd. He must have pursued the study of medicine three years, and attended at least two courses of Lectures, one of which must have been in this Institution.

3rd. He must have attended Clinical Instruction during, at least, one College term.

4th. He must have pursued the study of Practical Anatomy, under the direction of the Demonstrator, and to the extent required by the rules of the College.

5th. He must notify the Secretary of the Faculty of his intention to become a candidate, and deposit the amount of the Graduation Fee with the Treasurer on or before the 20th day of January. In case the candidate fails to graduate, the fee will be returned to him.

6th. Every candidate must undergo a full and satisfactory examination on all branches taught in the College.

7th. Graduates of other respectable schools of medicine will be entitled to an *ad eundem* degree, by passing a satisfactory examination, paying the graduation fee, and giving evidence of a good moral and professional character.

Books of Reference.

Students will find a good assortment of medical books and surgical instruments in this city. The following books of reference, among others, are recommended:

Chemistry.—Fownes, Brande and Taylor, Wells.

Anatomy.—Gray, Wilson.

Physiology.—Todd and Bowman, Flint, Dalton, Draper.

Materia Medica.—Waring, Stillé, Wood, U. S. Dispensatory, H. C. Wood's Abridgment of Pereira.

Medical Jurisprudence.—Taylor, Beck, Wharton, and Stillé.

Obstetrics.—Hodge, Cazeau, Bedford, Churchill.

Diseases of Women.—Scanzoni, West, Thomas.

Diseases of Children.—Condie, West, Tanner, Bouchut.

Surgery and Surgical Pathology.—Erichsen, Chelius, Druitt, Gross, Paget.

Practice of Medicine.—Flint, Aitken, Wood, Watson. Bennett's Clin. Med; Flint, or Walsh, on the Heart; Walshe on the Lungs; Habershon on the Alimentary Canal; Wilson on the Skin; Da Costa, or Barclay, on Diagnosis; Chambers, Rokitansky, Jones and Sieveking; Hammond, Military Hygiene.

Surgical Anatomy.—Maclise.

Microscopic Anatomy.—Todd and Bowman, Queckett.

Fees.

Lecture Fees for the Course	$50 00
Matriculation Fee	5 00
Dissecting Ticket	5 00
Hospital Tickets	5 00
Graduation Fee	25 00

From Alumni of this and other respectable Medical Colleges, the Matriculation Fee only will be required.

Board and Rooms.

Good board, with rooms and all the usual accommodations, can be obtained at as reasonable rates as in any other city. By associating in clubs, students may supply themselves with good accommodations at a material reduction from ordinary rates.

Spring and Summer Instruction.

Under the direction of the Faculty, a Spring and Summer Course is annually conducted, consisting of lectures, recitations, and clinical observations, at the Hospitals and College Dispensary. It is not intended that it shall be in lieu of a regular course, but is established to afford greater facilities to students desiring to remain in the city during summer for the benefit of its clinical advantages.

The outline of this course will be published before the close of the next session.

School of Chemistry.

Since the close of the last session, the spacious Laboratory of the College has been fitted up for instruction in *practical* Chemistry. Students are received at any time, and, if desired, can have the privilege of working at the tables, under the immediate direction of the Professor of Chemistry. Several courses are given, and students can enter at any time, upon any one of the courses It is, however, desirable that classes should be formed, the members of which will progress together Special instruction is given in the several departments of Chemistry as follows: Rudimentary Chemistry, Qualitative Analysis, Quantitative Analysis, Practical Toxi-

cology, Chemistry of the Urine, and Physiological Chemistry, Instruction in Practical Metallurgy and Assaying, and Chemistry of Arts and Manufactures, will be given to those who desire it.

Those desirous of the special advantages of this branch of study, and wishing further information, may address Prof. J. V. Z. BLANEY, at Rush Medical College.

Miscellaneous.

The means of illustration in the several departments are ample and constantly increasing.

In PRACTICAL ANATOMY, arrangements have been perfected which will secure an abundance and cheapness of *materiâ* at reasonable rates.

During the coming session, Prof. POWELL will engage in the active duties of his chair.

The appointment of Prof. Ross to the newly-created chair of CLINICAL MEDICINE AND DISEASES OF THE CHEST, will commend itself to the judgment of the profession, as of great importance. His especial duty will be to develop the clinical advantages of the College. An earnest, efficient worker, frequently honored by the suffrages of the profession, officially connected with the hospitals of the city, there is no doubt that his selection will meet with general favor.

In MATERIA MEDICA, a complete and entirely new cabinet of specimens has been procured, together with a full set of colored plates of medicinal plants.

In OBSTETRICS, in addition to the usual didactic instruction, cases of labor will be placed under the charge of advanced students. During the last session, a large number of students enjoyed such opportunities.

Prof. FREER is again visiting Europe, but will return to give his course, bringing with him all the advantages to be gained by critical observation in the Old World. His instruction will be fully illustrated by his usual *vivisections* and experiments.

Large accessions have been received to the MUSEUM, and the thanks of the Faculty are tendered to friends of the College for liberal donations of valuable specimens.

GRADUATES OF RUSH MEDICAL COLLEGE,

SINCE ITS ORGANIZATION.

SESSION 1843–44.

Wm. Butterfield	Thomas P. Whipple John McLean	*Honorary Degree.*

1844–45.

Alfred E. Ames	Josiah B. Herrick	Stephen Munroe, Jr.
William Fosdick	Almon W. King	Isaac Watts Garvin
Edwin R. Long	Samuel W. Ritchey	Arnold H. Needham
Ira E. Oatman	Nehemiah Sherman	

1845–46.

Elwood Andrew	Newton P. Holden	Halsey Rosenkrans
J. Herman Bird	Alexander B. Malcolm	Robert Scott
Daniel K. Hays	Cicero Robbe	William W. Welch
James M. Higby		

W. G. Montgomery, M.D., *Honorary.*

1846–47.

H. I. E. Balch	H. P. Hernes	Wesley Pierce
S. A. Barry	Ephraim Ingalls	Isaac Snyder
I. R. Bradway	Philip Kirwin	James F. Saunders
Joseph Blount	Leonard L. Lake	J. C. Leary
M. B. Elgin	Lafayette W. Lovell	David J. Peck
A. V. Gilbert	E. A. Gilbert	J. E. McGirr
Fred. E. Hagemann		

Samuel Grimes, M.D., *Honorary.*

1847–48.

Daniel M. Camerer	Ambrose Jones	I. G. Osborn
W. Chamberlain	C. W. Knott	J. Pearson
J. A. Clark	J. C. Lovejoy	A. Reynolds
A. B. Crawford	Sample Loftin	W. W. Sedgewick
Milton D. Darnell	William Matthews	Warren M. Sweetland
Uri P. Golliday	Thomas C. Moor	R. R. Stone
R. S. Hawley	I. H. McNutt	James P. Tucker
I. C. H. Hobbs	John Newton	C. C. Warner
E. G. Hough	John Nutt	L. W. Warren
G. J. Huey	O. C. Otis	Charles Ware

E. S. Kimberly, *Honorary.*

1848–49.

Alfred W. Armstrong	Israel G. Harlan	Edwin G. Meek
William W. Cunnerly	George M. Huggans	Gideon C. Paramore
Asa Clark	Calvin B. Lake	James C. Patterson
Harvey Cutler	Robert Pennel Lamb	Charles H. Richings
Joseph W. Freer	Orrin T. Maxson	John H. Warren
Charles C. Garrett	Peter B. McKay	Jerome F. Weeks

Dr. Thomas Hall, Dr. James H. Budd, *Honorary.*

1849–50.

Joseph L. Anderson
Clay Brown
Thomas D. Brown
Cyrus G. Blood
Henry F. Brown
Willard F. Coleman
Kimball Favor
Edward J. French
John Gregory
Isaiah P Hamilton
S. Rush Haven
George Higgins
Orson C. Hoyt
Alexander Hull
Franklin B. Ives
M. Tevis Klepper
Thomas G. Klepper
Charles J. Macon
Alonzo L. McArthur
Manly Miles, Jr.
Risdon C. Moore
William C. Oatman
Silas S. Parkhurst
William J. Paugh
John M. Phipps
William W. Perry
Giles P. Ransom
David Rogers
Josiah R. Snelling
John W. Spalding
Benjamin T. Stephens
Benjamin F. Stephenson
Edwin Stewart
Isaac E. Thayer
John M. Todd
Henry D. C. Tuttle
Harmon Wasson
Jas. P. Walker
George S. Wheeler
Zachariah H. Whitmire
Thomas Wilkins
William W. R. Woodbury
James R. Zearing

James S. Whitmire, M.D., *ad eundem.* Dr. E. S. Cooper, *Honorary.*

1850–51.

Gordon Chittock
S. L. Craig
F. W. Coolidge
J. H. Constant
G. S. Crawford
William M. Crowder
O. D. Coleman
H. C. Donaldson
C. J. Hull
J. C. Hinsey
A. M. Johnson
V. P. Kennedy
T. S. Loomis
H. E. Luther
L. D. Latimer
R. Morris
J. H. Murphey
L. A. Mease
S. R. Mason
G. C. Merrick
J. P. Porter
L. C. Pomeroy
B. O. Reynolds
William W. Sweeney
E. T. Spotswood
S. T. Trowbridge
A. M. Thorn
C. Van Doren
Edwin Wright
John Walker

James S. Russell, M.D., *ad eundem.*
Dr. James G. M. Meehan, Dr. Thompson Mead, *Honorary.*

1851–52.

Henry D. Adams
George W. Albin
Franklin Blades
Benjamin T. Buckley
George A. Bodenstab
G. Judson Bentley
William D. Craig
F. Marion Crouse
Alexander B. Chadwick
Theodore G. Cole
James A. Collins
Alexander De Armond
William H. Davis
John Garrison
Walter R. Godfrey
Stephen C. Gillett
William C. Hunt
Vincent L. Hurlbut
Marsena M. Hooton
William M. Hobbie
Orvis S. Johnson
Hosmer A. Johnson
Hiram C. Jones
Abram H. Knapp
Isaiah P. Lynn
Ezra M. Light
Hugh Marshall
Lewis D. Martin
M. G. Parker
J. Harrison Reeder
Dudley Rogers
A. F. St. Sure Lindsfelt
Leander D. Tompkins
Ezra Van Fossen
Edwin R. Willard
John D. Woodworth
Jeremiah Youmans

1852–53.

Robert F. Bennett
J. A. Breneman
D. Alphonso Colton
P. G. Corkins
William Curliss
O. D. Chapman
J. P. Cunningham
Elijah H. Drake
Hosea Davis
M. F. Gerard
Robert F. Henry
S. B. Harriman
Oliver S. Jenks
J. A. James
Warren Millar
Solon Marks
James B. Moffett
Henry Parker
H. W. Ross
John F. Starr
Henry S. Steele
Josiah Stanley
Hiram Smith
J. B. Wheaton
S. H. Whittlesy
R. Q. Wilson
Daniel Whitinger

A. D. Dwight
Robert W. Earle
James Gregory
John Phillips
James M. Proctor
Arthur Young
William M. Young

1853–54.

Wm. M. Avery
Albert Boomer
Washington Brenton
John W. Collver
Charles C. Cornett
Charles W. Davis
Isaac N. Davis
Joseph M. Edwards
Joseph N. B. Elliott
Hezekiah Fisk
Melancthon W. Fish
Thomas D. Fitch
William A. Hillis
Roscoe L Hale
John F Hamilton
Richard S. Hallock
Edward Hopkins
Anderson W. King
John W Lynch
William Manson
Harvey C. Morey
Henry W Mann
J. B. Morrison
R. M. McArthur
John T. Mayfield
John N. Niglas
Myron W Robbins
Simeon P. Root
Reuben Sears
William B. Swisher
George W. Slack
Thomas P. Seller
Charles D. Watson
William Watson
Enos P. Wood
David Whitmire
Stephen P. Yeomans

1854–55.

George A. Byrns
Jesse Barber
Lewis C. Bicknell
Horace C. Clapp
Michael R. Chadwick
Thaddeus M. Crombie
Berry W. Cooper
Hiram L. Coon
Solomon S. Clark
Jason N. Conley
Mordecai Davis
Darwin DuBois
James Evans
James Ford
Charles Gorham
George T. Goldsbury
James F Grove
Vernon Gould
Christopher Goodbrake
Thomas R. Hanna
Freeborn F. Hoyt
Lonzo L. Hutchinson
Elisha G. Horton
William H. Heller
Charles W. Jenks
Leroy H. Kennedy
John McHugh
John F. McCarthy
James C. McMurtry
Ross W. Pierce
Isaac Rice
Hugh Russell
Homer C. Rawson
Allen A. Rawson
James M. Suddath
John W. Trabue
Henry Van Meter
William Van Nuys
Hiram J. Van Winkle
Martin Wiley
Elias Wenger

1855–56.

Meredith C. Archer
J. Milton Barlow
Daniel Bowers
Almond C Buffam
Edward W. Boothe
David W. Carley
John W. F. Clawges
A. B. Carey
A. Jackson Crain
James L. Crain
Francis M. Constant
John E. Deming
Hamilton C. Daniels
Roswell Eaton
John J. Everhard
Edwin Gaylord
James P. Graham
William F. Green
James W. Green
William A. Gordon
Samuel Griffith
Robert Hitt
George W. Kittell
H. W. Kreider
David T. Kyner
L. L. Leeds
B. S. Lewis
D. LaCount
A. A. Lodge
D. M. Marshall
T. C. McGee
Z. H. Madden
B. G. Neal
W. H. Phillips
J. R. Robson
Bailey Rogers
F. Ronalds
Lee Smith
Joseph Williamson
Horace Wardner
R. Winton

J. Henderson, M.D., *ad eundem*.

Dr. M. M. Latta, *Honorary*.

1856–57.

A. W. Adair
J. S. Bowen
M. H. Bonnell
D. C. Bennett
E. F. Hubbard
A. M. D. Hughes
A. L. Kimber
J. C. Lowrie
L. H. Smith
D. H. Spickler
J. H. Tyler
J. P. Terrell

J. F. Cravens
L. D. Dunn
T. B. Dever
T D. Fisher
T. A. Graham
Lafayette H. Gray
Samuel Higinbothem
W. M. Hall
C. Hill
Charles Hamill
J. J. Luke
J. T. Miller
J. F. Marsh
E. McAferty
J. McCleary
J. B. Paul
Edwin Powell
J. L. Phillips
N. O. Pearson
T. J. Shreves
S. L. Urmston
W F. Vermillion
B. Wilson
B. F. White
P. J. Wardner
G. W. Wilkinson
E. A. Wilcox
B. Woodward
F. W. White

J. W. York, M.D., *ad eundem.*

Dr. William Long, Dr. H. Noble, *Honorary.*

1857–58.

L. B. Brown
L. Brookhart
R. C. Black
Freeman Clark
P. Corcoran
S. B. Davis
Benjamin Durham
J. B. Earl
C. N. Ellinwood
W. B. Harl
Allen Heavenridge
J. N. Green
J. D. Gray
T. C. Jennings
B F. Keith
Charles J. Keegan
Willis May
W. L. May
A. J. Miller
D. B. Montgomery
John O'Connor
O. B. Ormsby
J. T. Pearman
J. L. Patten
J. S. Pashley
B. F. Ross
W. H. Rockwell
J. Slack
William Somers
C. V Snow
L. D. Smedley
Benjamin F. Swofford
Owen Wright
J. D. Webster
J. B. Wilson
Thomas Winston
Eli York

Solomon Davis, M.D., Waldo W. Lake, M.D., *Honorary.*

1858–59.

L. Grant Armstrong
E. H. Ayres
Benjamin W. Bristow
A. M. Blackman
John A. Cook
George W. Corey
J. R. Conklin
N. M. Douthitt
E. C. Dickinson
John H. Farrell
Richard Hull
William C. Hopwood
Blixton Harris
William L. Kreider
J. W. W. Lawrence
W. H. Lyford
Lafayette Lake
R. McGee
F. Mason
Samuel McNair
J. R. Pearce
W. E. Peters
E. O. F Roler
E. A. Steele
P. R. Slingsley
A. B. Taylor
Myron Underwood
E. L. Welling
R. F. Williams
J. H. Wiley
J. F. Williams

J. Drake Harper, M.D., *ad eundem.* S. M. Mitchell, *Honorary.*

1859–60.

Orson B. Adams
John J. M. Angear
John T. Billington
Frederic Bartels
John B. Baker
Edward L. H. Barry
Hiram Carnahan
Henry Durham
B. I. Dunn
John Dancer
Rufus M. Elliott
John E. Ennis
John B. Felker
A. M. Golliday
Jethro N. Hatch
Daniel Kirkpatrick
Thomas I. Fritz
Leigh R. Holmead
Milton N. Isaac
William Irwin
Hiram C. Luce
John McDamron
Percy McAlpin
Philip Matthei
Wm. F. Osborn
George W. Richards
Edward Thomas
James Thompson
Vincent S. Thompson
J. S. Underwood
Wm. V. Wiles
Samuel N. Sheldon
C. M. Smith
Robert B. Ray
James F. Spain

Dr. Calvin Wheeler, *Honorary.*

1860–61.

Willford Bates	Wm. B. Graham	Richard E. McVey
Charles Bunce	Henry J. Herrick	John Murphy
Allen S. Barndt	Zenas P. Hanson	Samuel C. Owen
Wm. C. Brown	Clinton D. Henton	Allen M. Pierce
Sidney S. Buck	Ezekiel Keith	Henry V. Passage
Benjamin H. Bradshaw	John T. Keables	Madison Reece
Henry S. Blood	Enoch W. Keegan	E. Fred. Russell
Elijah A. Clark	Abner D. Kimball	Theodore W. Stull
Daniel M. Cool	Robert M. Lackey	Edward P. Talbott
Thomas J. Dunn	Z. James McMaster	Charles B. Tompkins
Edward C. De Forest	James M. Mayfield	Israel B. Washburn
Morton M Eaton	Henry H. Maynard	O. G. Walker
George Egbert		

Dr. Robert C. Hamill, Dr. Theodore Hoffman; *Honorary*.

1861–62.

Albert A. Ames	Thomas G. Drake	William Rush Patton
Charles E. Allen	James B. Farrington	Holland W. Richardson
Stephen G. Armstrong	A. Z. Huggins	William R. Russell
George W. Beggs	Jacob H. Houser	Charles M. Richmond
Aurelius T. Bartlett	Riley B. Hayden	Robert E. Stevenson
Leonard L. Bennett	Jacob M. Hagey	Samuel B. Ten Broeck
James Brown	Clark E. Loomis	I. Allen Torrey
Elijah W. Boyles	I. Meek Lanning	Alfred H. Whipple
William L. Cuthbert	George J. Monroe	D. Bishop Wren
J. Griffin Conley	William Meacher	John A. Ward
William D. Carter	William McKnight	Egbert H. Winston
Samuel M. Dunn	Fordyce R. Millard	

J. C. Taggart, M.D., *Honorary*.

1862–63.

Gordon Andrews	Daniel C. Jones	Wesley Phillips
Charles F. Barnett	Hiram M. Keyser	Byron G. Pierce
Ela L. Bliss	Charles B. Kendall	William C. Piatt
E. Bishop	James Kelly	John M. Rankin
Frederick W. Byers	Edward E. Lynn	James I. Ransom
James Cunningham	Charles F Little	Lemuel H. Rogers
Philo W. Chase	G. Allen Lamb	Fernando C. Robinson
John W. Dean	James Muncey	Lewis H. Skaggs
William B. Dunkle	George C. McFarland	John W. Saucerman
Charles F. Dilly	Frank C. Mehler	Abram L. Small
Charles F. Elder	James H. McNeil	W. H. Smith
Francis A. Emmons	Thomas H. Montgomery	H. W. Sigworth
Uriah B. Ferris	John McLean	William Scott
Stephen N. Fish	Samuel L. Marston	William H. Tompkins
William M. Gregory	L. Pitt Y. McCoy	Pembroke R. Thomas
Harrison H. Guthrie	Elmer Nichols	John Ll. Williams
Myron Hopkins	J. Copp Noyes	William T. Wilson
Pryer J. Herman	Cornelius O'Brien	James A. Williams
George F. Heideman	Jacob W. Ogle	John Zahn
Samuel G. Irwin		

1863–64.

Frank B. Adkins	Lewis H. Goodwin	Jabez H. Moses
Harrison Akely	J. J. Gulick	Alexander P. Nelson
Orlenzer Allen	J. Milton Hiatt	Eugene L. Nelson

Samuel J. Avery
Lyman F. Babcock
Charles M. Babcock
A. J. Bacon
S. K Barclay
G. Frank Beasley
George R. Bibb
William T. Bradbury
Charles A. Bucher
Spencer Byrn
Frank D. Cass
F. Marion Cassell
Elliston Chamberlin
James E. Coakley
Ephraim Dayton
James W. Dora
T. B. Dora
Franklin Eells
J. Wesley Egbert
F. Edwin English
J. B. Fares
Horace Gaylord
E. T. Glasener
J. A. Goldsbury
Robert L. Hill
H. C. Hollingsworth
Frank A. Jordon
Erwin L Jones
Augustus P. C. Jones
I. C. Johnson
George N. Jennings
John J. Kelly
Leslie E. Keely
Robert S. Kelso
John R. Kerrell
A. H. Kinnear
L. J. M. Kords
Bartlett Larimer
Gilbert B. Lester
Timothy T. Linn
Lorenzo D. Lowell
J. Ellis Lyons
S. B. McGlumphy
Peter S. McDonald
Samuel Mendenhall
Henry A. Mix
Martin E. Munger
James A. Monroe
J. N. O'Brien
Roswell R. Palmer
G. Hial Peebles
Edward H. Price
Charles M. Richardson
Philip Shaffer
George W. Schuchard
William A. Smith
J. M. Still
J. Dwight Stillman
John M. Swift
John W. Thayer
Joel T. Tevis
Marvin Waterhouse
John M. West
William F. Welsh
J. A. Williams
James M. Watkins
G. D. Winch
Samuel Wilson
Charles A. White
Orlando S. Wood
Titus P. Yerkes

Chas. White, M.D., Frederick S. C. Grayston, M.D., *ad eundem*.

1864–65.

W. R. Adair
J. Madison C. Adams
Henry Allen
R. M. Allen
W. C. Baird
Braxton Baker
Zopher Ball
John Becker
Newton Baker
C. R. Blackall
E. J. Bond
D. W. Bosley
W. E. Bowman
James G. Boardman
J. W. Brown
W. H. Bright
J. G. Blanchard
C. H. Brunk
C. H. Carlisle
E. P. Catlin
W. E. Chamberlin
H. F. Chesbrough
Frederick Cole
Samuel Cole, Jr.
H. N. Clark
J. L. Congdon
J. Cooper
John Cotton
Clinton Cushing
M. Morton Dowler, Jr.
Andrew J. Eidson
Samuel S. Elder
Smith T. Ferguson
S. A. Ferrin
Henry A. Folger
O. D. Ford
J. H. Foster
Samuel Galloway
H. T. Godfrey
R. Romanta Gaskill
J. Thomas Hale
J. M. Harrah
Thomas C. Hance
A. P. Herndon
Wm. H. Hess
Smith H. Hess
J. W. Herdman
Francis M. Hiett
H. Edward Horton
George W. James
Merritt S. Jones
David R. Johnston
Charles Kerr
G. F. Keiper
W. J. Kelsey
John L. Kite
Charles E. Keuster
C. E Lamon
J. H. Leal
Josiah Lee
J. G. Meachem, Jr.
L. B. Morrow
William A. Morse
G. D. Maxson
William M. Newell
N. W. Nesmeth
Joseph Otto
William P. Penfield
John W. Powell
Joseph L. Prentiss
G. W. Priest
Charles H. Quinlan
Lafayette Redmon
A. J. Rodman
C. B. Reed
Flavel Shurtleff
J. L. Shepard
Emery Sherman, Jr.
Asbury E. Smith
W. H. H. Smith
M. S. Stahl
G. A. Stevenson
D. Hedrick Stratton
G. C. Smythe
J. L. Trousdale
John W. Trueworthy
Henry Van Buren
G. W. Van Zant
Theodore Wild
Joseph H. Wilson

A. J. Darrah	C. J. Lewis	Horatio B. Withers
S. A. Davison	A. W. Lueck	George Worsely
S. W. Dodd	Carl J. Lucas	O. P. B. Wright
A. C. Douglass	W. B. Lyons	Charles Young
A. S. Ehle	Isaac L. Mahan	

Martin Baker, M.D., W. H. Dubler, M.D., D. W. C. Denny, M.D., N. Wright, M.D., *ad eundem.*

1865–66.

Ethan P. Allen	W. B. Graham	Horace Nichols
T. E. Annis	John N. Grover	S. F. Paddock
S. B. Ayres	C. Judson Gill	N. T. Quales
C. Isham Allen	James E. Gowan	Rolla T. Richards
Wm. J. Asdale	W. S. Goodell	James J. Reed
Luther Brown, Jr.	John W. Grœsbeck, Jr.	Charles E. Rice
George W. Brown	Julius C. Holmes	Wm. D. Rutledge
T. Newton Booe	Wm. J. Harris	E. Malden Smith
Edward E. Berry	Wm. Harper	M. P. Sigworth
George A. Clarke	Wm. S. Herrick	Wm. D. Scott
Samuel C. Cravens	Carter B. Higgins	D. Q. Scheppers
J. N. Crawford	Abijah F. Henry	M. F. Smith
James Cozad	J. M. Hayward	Abram A. Sulcer
John W. Craig	Fred. W. Hoffman	James E. Sutton
Richard Carscadden	E. Howard Irwin	Charles E. Stedman
Robert H. Crowder	Wm. H. H. King	Charles True
James A. Comstock	George W. Langfitt	Norman Teal
George M. Chamberlin	G. F. Lyons	J. M. Taggart
Wm. J. Carter	Truman F. Loop	Henry Tombœken
James C. Davis	Peter T. Lange	S. S. Troy
Franklin M. Denny	Jacob W. Magelssen	F. J. Van Vorhis
F. A. Dietrich	James J. Morgan	John T. Wilson
Jos. B. Eversole	James M. McMasters	Robert L. Walston
Jerome B. Egbert	A. Wilbur Meachem	Charles J. Winzenried
John A. Edmiston	John G. Munsell	L. O. P. Wolfe
Henry R. Fowler	W. W. Murray	Francis W. Watson
J. C. Fitch	S. C. Maxwell	George A. Wilson
Chester S. Ford	Wm. D. Morehouse	R. B. Wetmore
John Guerin	E. A. Morse	M. V. B. Witherspoon
W. L. Goodell	John R. McDowell	A. J. Willing

Albert H. Hoy, M.D., J. J. Brown, M.D., W. Louis Rabe, M.D., W. Y. Leonard, M.D., *ad eundem.*

Gerhard Christian Paoli, M.D., *Honorary.*

1866–67.

Curtis B. Ames	Samuel Hawley	George W. Ray
Upton A. Ager	Semun R. Hewitt	Charles A. Rockwood
William H. Buckmaster	John P. Humes	Dolphus S. Randall
Benjamin F. Brown	John N. Jones	Jefferson Robinson
Charles C. Brown	Hiram D. Kellogg	Stephen E. Robinson
Horatio N. Bradshaw	Benjamin F. Kierulff	Dan. S. Root
Robert J. Brackenridge	Justin Worthing Lamson	T. William Schwan
Gideon V. Bachelle	William A. Laflen	T. Newton Stewart
Otto Bosco	William J. Langfitt	Irving R. Spooner
Wesley Clarke	Albert Morrall	John Simpson
Jerome H. Crouse	Nicholas R. Marshall	David T. Sellards
J. Gilbert Conner	Joseph K. Mayo	Lyman T. Strother
Andrew P. Davis	George E. Miller	James K. Secord

William P. Dunne
William T. Dougan
Leonard W. Estabrook
William Eaton
Charles A. Edgar
Curtis Treat Fenn
James Luther Gandy
Edward B. Hobson
John Hughes
Wm. Baker Hathaway
John W. Hensley
Joseph W. Morey
William H. C. Moore
Allen P. Mitten
Jerome C. Merrick
John Massmann
Frederick D. Morse
Alexander B. Newton
Henby B. Newell
Sanford T. Odell
Henry K. Palmer
William Porter
Nelson L. Sweetland
Samuel Thompson
John J. Taylor
Alexander W. Trout
John C. Tatman
Thomas J. Tennery
Henry B. Upton
W. Hendrix Veatch
Evart Van Buren, Jr.
Joseph Van Cowan

James Murphy, M.D., Maximillian A. Cachot, M.D, *ad eundem.*
David Prince, M.D., Ezra S. Carr, M.D., *Honorary.*

1867–68.

Francis G. Arter
James B. Armstrong
James H. Barnwell
Hugh Brownlee
James Barr
A. W. Bosworth
James R. Barnett
James H. Baker
Amos Babcock
Robert N. Barger
William H. Christie
Pascal L. Craig
John Cassidy
Henry A. Chase
James M. Cook
J. A. Carter
F. Wallace Coffin
John B. Draper
Nelson A. Drake
David L. Davidson
Thomas A. Elder
George W. Elkins
John T. Foster
John G. Frank
Benjamin H. Freeland
David M. Finley
Frank Fifield
William Flinn
William J. Fern
John A. M. Gibbs
Lyman T. Goodner
John H. Goodell
John B. Griswold
Henry C. Gemmell
Samuel R. Hicks
Abrogene Holland
Cyrus Heywood
Fernand Henrotin
Merritt Hurst
William H. H. Hagey
Byron Holmes
Christian B. Hirsch
J. Robert Haggard
Walter L. Johnson
Thomas C. Kimball
Thomas N. Livesay
Gershom J. R. Little
Edmund L. Lathrop
William A. Looney
Louis B. La Count
John G. McKinney
Abraham Miller
Ben. C. Miller
Charles Muth
Leonidas B. Martin
James McClure
John B. Moore
Americus V Moore
Samuel P. McCrea
Thomas C. McCoughey
William J. Maynard
Thomas C. Murphy
Erancis McGuire
Charles A. McCollum
Albert B. McKune
Edmund L. Mayo, Jr.
James Moffit
Albertis P. McCullock
William R. McMahan
Garrett Newkirk
John R. O'Reiley
Charles T. Parkes
William Quivey
William S. Pitts
Joel Prescott
John H. Peters
Bennett A. Payne
James Pankhurst
William R. Page
Joseph B. Rood
J. Rodney Rundlett
Wilhelm Rienholdt
Antinous A. Rowley
Wm. S. Robertson
Justin Ross
William S. Rowley
E. H. Pardu
John G. Riddler
Corydon Richmond
Royal Reed
Harrion Stelle
Ebert S. Sharon
Daniel Spittler
Josiah T. Scovill
John W. Shiption
DeWitt Clinton Smith
S. E. Scanland
John P Seawright
Oscar F. Seeley
John F. Shronts
Dana B. Segur
Charles B. Thrall
D. H. Arthur Thrane
George O. Taylor
John E. Tuttle
L. E. Towne
W. Alphonso Wood
D. Lindley Woods
Matthias S. Wheeler
Thomas Audley Wakely
Charles A. Wheaton
Richard M. Wigginton
Hiram G. Wyckoff
Rush Winslow
James I. Wakefield
Henry Joseph Warworth
Thomas J. Yount

Daniel C. Babcock, John W. Cowden, W. F. Hani, William Little, William N. Bailey, Abram Hard, } *ad eundem.*
Joseph Van Dyke, Orpheus Everts, John Ten Broek, J. J. Woodward, J. S. Bobbs, } *Honorary.*

CATALOGUE OF STUDENTS,

1867-1868.

Francis G. Arter, Illinois.
Wm. F. Artz, Illinois.
James Armstrong, Illinois.
Wm. J. Ashby, Indiana.
Horace J. Avery, M.D., Michigan.
Arthur B. Brackett, Illinois.
Hugh Brown, Iowa.
Wm. M. Boyd, Illinois.
James H. Baker, Indiana
Robert Briggs, Illinois.
Amos Babcock, Iowa.
James Barr, Iowa.
Robert M. Barger, Illinois.
Wm. G. Bradley, Illinois.
Russell Broughton, Wisconsin.
James R. Barnett, Wisconsin.
John M. Bowers, M.D., Illinois,
Hugh Brownlee, Indiana.
Simon P. Brown, Illinois.
D. J. Brookings, Illinois.
F. W. Belfield, Illinois.
James H. Baker, Missouri.
James H. Barnwell, Iowa.
Daniel C. Babcock, M.D., Wisconsin.
Wm. N. Bailey, M.D., Indiana.
A. W. Bosworth, Illinois.
T. D. Brown, Wisconsin.
Wm. H. Christie, Illinois.
John Cassidy, Indiana.
John J Carlin, Illinois.
James A. Carter, Illinois.
James M. Cook, Michigan
Stephen H. Clizbe, Michigan.
Henry P. Crawford, Illinois.
Wm. G. Cochran, Illinois.
Pascal L. Craig, Wisconsin.
John P. Cowdin, Illinois.
James W. Campbell, Missouri.
F. Wallace Coffin, Ohio.
Thomas Cosgrove, Wisconsin.
Henry A. Chase, Wisconsin.
Nelson H. Church, Indiana.
Mauritz B Carleman, Illinois.
R. W. Cavins, Indiana.
Cass Chenoweth, Illinois.
Peter A. Collet, Iowa.
James H. Callahan, Illinois.
John L. Conelly, Illinois.
John W. Cowden, M.D., Iowa.
P. Curran, Illinois.
David E. Cutler, Iowa.
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Orestes A. Crossman, Michigan.
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THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—JUNE 15, 1868.—*No.* 12.

PROGRESSIVE PARALYSIS OF THE INSANE.

(PARALYSIE GÉNÉRALE DES ALIÉNÉS OF THE FRENCH.)

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Thesis for the Degree of M.D., Presented to the Faculty of the Rush Medical College, Chicago.

(*Continued from page* 340.)

NOTWITHSTANDING this variance of opinion, all are agreed that hereditability is a powerful cause, that it plays an important part in this dreadful disease. M. Bayle admits it as not doubtful in more than half of the cases. M. Calmeil reduces this proportion to one third of the cases. This proportion would probably still be diminished if we only sought among the ancestors for general palsy; but all the neuroses, different palsies, etc., are admitted. These causes may be regarded as a predisposition to general palsy for the descendants, but they do not strictly indicate in what proportion general palsy itself is transmissible.

M. Calmeil says that this class of patients have among their ancestors a large number who have died from chronic, diffuse encephalitis; or encephalitis with deep, circumscribed foci; or from congestive affections of the intra-cranial or cerebro-spinal centres. That it is very probable that the nervous system, from a very early date, even from a vicious preorganization, was affected.

In another place, the same author says that more than one fourth of the patients affected with general palsy, have among their ancestors those who were affected with melancholia, mania, dementia, hemiplegia, or epilepsy. It is a question worthy of consideration, and which we should be happy to discuss if time and space were here admissible, whether procreation at an advanced age of the parents, and consanguineous marriages, are conditions which augment the frequency of the hereditability in general palsy, as they are usually admitted to do in madness. There is one condition which would tend to diminish the frequency of hereditary transmission of general palsy: *i. e.*, this disease is comparatively seldom seen with woman, whilst it is very common with man. It is well known that authors admit hereditability to be more often transmitted from the mother than from the father. To strengthen this latter idea, we can only here mention that Mr. Baillarger has found in 600 cases of mental disease, 453 of which were hereditary, that 271 were transmitted by the mother, and only 182 by the father.

Temperament.

Its influence appears to be doubtful; yet plethoric persons, from their greater aptability to congestions, those having thick-set limbs, large cavities, the pilous system black and greatly developed, with the muscular system strongly accentuated, are noticed to be the most frequently affected with general palsy.

Sex.

As a general rule, one fourth of the persons entering the asylums of the insane are men, and only one tenth are women; yet, after Bayle, we find twenty-four cases among females for 182 among males.

After M. Calmeil, who publishes eighty-two observations, there are nine cases among females and seventy-three among males.

The women who are affected are generally from the lower classes, and especially from the class given to prostitution.

Of all, the most exposed is man, vigorous man, who, confiding in his strength, allows himself to be mastered to a great degree by his passions, thus committing both physical and mental excesses, which he foolishly believes do not interfere with his constitution: yet, alas! too often, when least expecting it, he becomes a victim, and is now to be most basely humiliated. For reasons too evident here to be mentioned, let it be observed that the class furnishing the next greatest number to general palsy, is the courtesan. Least of all exposed, it appears, is noble woman in the easy walks of life, placed by wealth above excessive corporal and mental fatigue, and less given to unbounded excesses of the passions.

Age.

M. Calmeil says he has "never seen this disease select any one before the age of 22; it is rare from 23 to 26; augments rapidly from 27 to 35; very frequent from 35 to 55; from 55 it continues to decrease in frequency." In old age this malady is not seen, but in its place is found cerebral softening of greater or less extent, accompanied with senile dementia. After many authors, the age of 41 is often a critical period, yet we will only remark that the period of commencement of general palsy is very variable.

Profession.

There are certain professions which inevitably have a tendency to produce cerebral congestion, and thus predispose to our disease. Among them we may mention, wine merchants, distillers, grocers; tobacco merchants, especially those selling at the same time alcoholic drinks; officers of the army, who eat and drink too much; cooks, who are continually exposed to a high temperature, to various gaseous emanations, and often given to drinking; prostitutes, devoted to every pleasure that pleases their palate or their misguided mind; paint-

ers, sculptors, and musicians, whose imagination is continuall excited, are predisposed to dementia when leading a regul life; but when, with their intellectual fatigue, they becom too devoted to Venus, or to alcoholic drink, they are predi posed to general palsy. Finally, it is considered that a intellectual excess causing frequent fatigue, produces a pr disposition. In the great centres of population, where all th causes of general palsy seem to unite to produce this frightf disease, the frequency of which is said by many to be increas ing, do we find this affection much more often than in sma cities and in the country.

Those professions which are sometimes accompanied by intoxication, as alcoholic, or saturnine, undoubtedly have a direct action in producing this disease, as some authors admit and it is a great question if palsy produced by saturnian influ ence should have a separate place in nosology.

The distinction between general palsy as produced by lea and between the same disease as we have described it, ar only symptoms; such as coloration of the skin and nails whe in contact with a sulphurous bath, or the arthralgia or co peculiar to the saturnine influence; there are a few other di tinctions which disappear in a short time, and then the disea is to march as has been described. The same reasoning as applies to general palsy produced by alcoholic intoxication, a it, when once fully developed, presents the same symptom march, termination, and anatomical lesions.

Climate and Season.

It was believed for some time that general palsy did not exist in hot countries. Since its symptomatology is better known, and since it has been better separated from mental alienation, numerous cases have been found in those countries where its existence had been denied.

Contrary to the opinion of Esquirol, it is found not to be a rare disease in the south of France, in Italy and Spain, yet in these latter countries it appears to be less common than in

Paris and London. Notwithstanding this malady is said to begin or present its paroxysms in autumn, and to generally terminate by death during the same season, yet it appears from the works of M.M. Baillarger, Aubanal, and Thore, that the frequence of general palsy is the same in all seasons.

Occasional Causes.

Cerebral congestions: M. Bayle considers them as being constant; many authors admit the same opinion. Their character is to be sudden; most often they are preceded, accompanied or followed by a change of disposition, or of character. M. Parchappe considers these congestions as being rather the effect of the disease than its cause. In many cases we should consider the cerebral congestions only as symptoms, and not as causes more or less distant. If a congestion is soon followed by an inequality of the pupils, difficulty of speech, deviation of the tongue, muscular weakness, change of character, etc., we may diagnosticate a case of general palsy which had its beginning anterior to this cerebral congestion, and easily coincide with M. Calmeil, when he says: "This disease sometimes begins by a violent congestive attack, either apoplective or convulsive."

Sanguineous Suppressions.

Exanthematous suppressions are at least doubtful as a cause. The suppression of hæmorrhoids, of epistaxis, of the menses, has been given by some. As to the suppression of the menstrual flux, it is proved that among the many affections which may result from it, general palsy must be included. A fact worthy of attention, and which may often foreshow an amelioration or a relapse is, that it has been remarked that the menses, suspended during the attacks, reappear during the intermissions, and even during the remissions. Some paralytical women have, during their menses, lost complete control of the anal and vesical sphincters, and thus, being unable to retain the urine and fæces, they are, as they say in France, *gatenses*.

Excesses.

They may be divided into two classes: 1st, psychical; 2nd, sensual.

Among the first may be arranged that feverish super-activity which impels man to desire rapidly to obtain honors, fortune; to undertake distant voyages, or causes him to begin immense enterprises, which demand an enormous increase of intellectual labor; excesses which bring in their train profound chagrin, such as deceived ambition, or reverse of fortune.

Mortifications, profound and repeated, such as sorrow resulting from broken love, the death of a parent, etc., whatever may be their cause, are a powerful incentive to mental alienation.

In these cases the apparition of simple madness differs from the explosion of the palsy. When this latter arises as a result of some deep chagrin, usually it begins suddenly, in such a manner that there may seem an exaggeration of real sorrow, which even may be considered as a first symptom of that form of the disease known as the melancholical variety.

An excess of the passions has also been given; anger, becoming violence from futile motives, political preoccupations which are so often reflected in delirium.

Sensual Excess.

Here should be noticed sensual habits; too much alcohol, stimulant, aside from its producing delirium tremens, is now too well known to be a very frequent cause of general palsy. When a person has become the victim of chronic alcoholism there may occur a moment when new symptoms, characteristic of our disease, become apparent; and, although it is not always easy to determine the exact date at which begins the cerebral lesion, yet we now behold it making rapid progress towards a fatal termination.

Some authors cite cases of general palsy resulting from the excessive use of tobacco or opium.

Onanism and venereal excesses are powerful and frequent causes. After Calmeil, cerebral congestion is frequent among women devoted to gallantry, and among that numerous class who, debasing the noble qualities of man, divinely given, lead and terminate a life more brutal that that of the beast of the field, by vile prostitution.

Both males and females, living a life of celibacy, are more exposed to general palsy than are married people. Useless to here discuss this point.

Not desiring to enumerate the various diseases of the viscera, enlargements of the aorta, hypertrophies of the heart, which have been given as causes, we would remark that syphilis would appear to be a cause, especially when in the syphilitic diathesis there are cerebral accidents produced by tumors of the cranium or of the brain. As a general rule, we think the paralytic should be considered as such, and if he has syphilis, put it down as a coincidence, a concomitant, and not as the active cause of his palsy, except in rare cases.

In regard to the pellagra, a disease yet too little known, being so powerful a cause as to produce pellagrous palsy, not differing from general palsy either by its symptoms, its course, or its anatomical lesions, as M. Baillarger maintains, it appears not yet to be demonstrated. Because the pellagra may produce vertigo, melancholy, violent delirium, and often not before ten years, torpor and severe convulsions, is it a sufficient reason to conclude that it is analogous to general palsy? More consistent would it be to consider it as a concomitant. If we are to give as causes of this disease all the maladies of the medical nomenclature, when shall its intricacies be made plain?

Hematoma Auricularia.

Although these tumors are sometimes seen in other nervous diseases, yet especially do they become manifest in general palsy. Their most probable cause is from the great tendency to cerebral congestion during this disease, which may easily increase the intensity of the aural circulation from the inti-

mate relation of the auricular vessels with those of the head. We can here no more than refer for their description to M. Marcé, Paris, 1862, and especially to M. Foville, of the same city.

Pathological Anatomy.

Before entering into this part of our subject, we feel it to be just to declare that for the following lines we are greatly indebted to the works of M.M. Marcé and Calmeil, of Paris.

Often in this disease the cranium is very thick, and of abnormal density. If the subject has died from congestion, the skin of the head is greatly injected. Various authors have endeavored to explain the symptoms seen in this disease, by starting from different standpoints. Thus M. Bouillaud, reflecting on the want of co-ordination which is remarked in general palsy, believes that the principal lesion is seated in the cerebellum. He has remarked, in analyzing the work of M. Calmeil on "Diffuse Chronic Encephalitis," that this author's observations only related to the cerebrum, and that the cerebellum had been neglected. M. Parchappe, in his writings, has endeavored to reconcile M. Bouillaud's ideas, and subsequently found the cerebellum often interested, and sometimes so much so, that he (M. Parchappe) considers the lesions of this part of the brain as frequently pathognomonic of general palsy at an advanced period. Nevertheless this latter author has found these lesions less often in the cerebellum than in the cerebrum. Pathological anatomy would seem to explain the trouble of speech at the beginning of this disease. After the works of M. Flourens, who locates intelligence in the cerebral lobes, and after M. Bouillaud, who places speech under the dependence of the anterior lobes, we might endeavor to comprehend these symptoms. Indeed, after M. Parchappe, it is on a level with the frontal horns that the softening and the adhesions are the most prominent.

The theory of the lesions which occur in respect to the nutritive functions, are thus given in the Cerebral Pathology of M. Pinel: "We observe that it is often the muscles of the

tongue, larynx, pharynx, œsophagus, diaphragm, the sphincters of the anus and bladder, which first begin to be paralyzed; and it is only afterwards that the inferior extremities, firstly, and then the superior, are affected in their movement. No doubt, for us, but that the affection begins by a lesion of the olivary bodies, or of the nervous fasciculi which come from them; or if it begins at the cerebral periphery, it ought to interest some fasciculus or nervous ramification connected with the olivary body; moreover, that the nerves of the pharynx, larynx, and tongue, originate from the olivary fasciculi, as well as the facial nerve (trembling of the lips and cheeks); that, after Bell, the olivary fasciculi are destined for the respiration, because the pneumogastric, in part, owes to them its origin; that we remark with these patients inertia of the diaphragm, slowness of the respiration, and slowness of the heart; that the lesion of the pneumogastric will explain all these symptoms, as well as the paralysis of the anal and vesical sphincters." We see by this passage that the lesions of the functions of nutrition are multiple; moreover, that the palsy of the internal organs would precede that of the organs of locomotion. I have not found M. Pinel's enunciation confirmed in the works of other authors. If the lesions of the functions of nutrition are not anterior to those of locomotion, it is probable that they begin at the same time. Hypochondriacal ideas, frequent at the beginning of palsy, could, after the theory of M. Moreau (of Tours), be considered as a manifestation of it. The functions of excretion are, moreover, often very irregular; constipation is frequent at the commencement. In some cases, as has remarked M. Baillarger, a sudden retention of the urine arrives to enlighten the diagnosis, till then doubtful. A symptom well known among guardians in asylums is the voracity of the patients, who are about to become paralytic. This symptom is so well known among them, that "to eat like a paralytic," is a common expression in French asylums. This symptom is the more important, as it exists most often from the beginning of the disease. It may be as easily explained by the lesion of the pneumogas-

tric, as the trembling of the facial muscles by the lesion of the facial nerve; but, as has remarked M. Parchappe, it is not necessary to seek for lesions of special nerves, to have an explanation of these facts. It is proved that if the lesions of the cortical part are constant, they do not exist alone, and that those of the white substance most usually accompany them. If we admit, with M. Flourens, that the cerebral lobes are the origin of movement and of sentiment of the whole body, it is easy to comprehend the multiple and simultaneous lesions of the different functions of the human body in general palsy. M. Parchappe, inspired with the works of M.M. Rostan, Lallemand, Bayle, and especially with those of M. Calmeil, writes that when general palsy appears from the beginning with all its characteristic symptoms — special delirium, difficulty in speaking, agitation, lesion of motility — we shall find the specific, anatomical lesion extending over the whole surface of the cortical part of the brain.

If we admit the hypothesis of Gall, adopted by M. Parchappe, *i. e.*, the localization of intelligence and general movement in the cortical surface, then we might comprehend how movement may be affected, and intelligence yet preserved. Nothing, however has yet proved the truth of this assertion; nevertheless, this hypothesis would reconcile itself with observations, if we admitted that one portion of the cortical surface, remaining healthy, could suffice for the preservation of the intellectual faculties; then we might comprehend how the delirium would only appear when the inflammation, even slight, had invaded all the cortical surface; this would also explain the delirium, subsequent or anterior to the palsy.

Nothing proves, in the observations of authors, that the patient has not succumbed from a complication rather than from the general palsy itself. In palsy without delirium, it is probable that if the prolongation of life had permitted the anatomical lesion to completely invade the cortical substance, the true characteristic symptoms, special delirium and palsy, would have been observed. Finally, whether the inflammation remains in the white substance, develops itself around a

pathological production, whether it goes from the medulla dorsalis to the encephalon, etc., in all these cases, when the inflammation will have gained a certain extent of the cortical substance, we shall observe symptoms of general palsy; when the lesion is general, the affection will appear with all its features strongly accentuated.

We will here briefly mention some of the appearances presented at an autopsy. The pia-mater will be found to have lost its transparence, and is now opaque, reddish, from its numerous, tortuous, turgescent vessels. The cellular tissue of this membrane has thickened, and is infiltrated with more or less serous or sero-sanguineous liquid. If we attempt to remove it, it no longer comes away in a normal manner, but in large pieces, or even all at once, owing to its increased solidity, which will be proportionate to the intensity and duration of the disease. While endeavoring to remove the pia-mater from the cortical substance, there will be manifested the great characteristic, anatomical lesion of this affection, *i. e.*, adhesions. These latter are not suddenly formed; but, as has been well remarked and described by M. Calmeil, are preceded by an inflammatory state, which was most concentrated where the adhesions are the most characteristic. Sometimes these adhesions between the pia-mater and the cortical substance are so intense, that it is impossible to remove the membrane without taking with it more or less of the nervous substance, thus leaving excoriations in the cortical part. These adhesions are principally found on the anterior and inferior faces of the anterior lobes, and around the Fissure of Sylvius. They are less common on the occipital lobes; when occupying also the cerebellum, they are usually found on the side of its superior and inferior faces. M. Calmeil says: "If the disease has not been intense, the inflammatory state does not appear to have affected the cerebral substance in contact with the meninges to a depth of only a few millimetres; on the contrary, if the inflammation has passed a certain degree of intensity, then the gray substance of the corpora striata, of the cornua ammonis, and of the thalami optici, is interested in the

inflammation. Very often inflammatory foci occupy the circumvolutions which border the fissure of Sylvius, those at the right and left of the falx cerebri, and those corresponding to the inferior part of the anterior cerebral lobes. The same are also seen in the superior, lateral, and convex regions of the middle and posterior lobes of the cerebrum.

The consistence of the cortical substance is softened so much that the slightest touch of the finger or scalpel removes more or less nervous substance. Its coloration is no longer normal, but presents various degrees of redness from congestion; if the disease has been greatly prolonged, the patient not having died during a congestive attack, it may then appear pale or yellowish. The gray substance is reduced by atrophy, and in some cases retains not more than half of its normal thickness.

The white substance of the brain is also congested, having its vessels dilated; the latter remain gaping when a section of the brain is made. If the disease has been of long duration, the white substance may have become hardened and elastic, and by its contractions, have enlarged the lateral ventrics.

The above are some of the appearances visible to the naked eye. If now having made a preparation of the pia-mater, taking a good microscope, we find its vessels considerably enlarged; its capillaries appearing as if covered with fine granulations; its texture presenting extravasated globules of blood, granular cells, and molecules.

The aerosity of the pia-mater under the microscope presents a certain number of free globules of blood, globular cells, ganules, and sometimes pus globules.

M. Calmeil states that in cases of moderate intensity, while the capillaries of the pia-mater are found reddened, greatly developed, and increased in number, yet the texture of this membrane continues to remain with scarcely any infiltration. Also, that the cortical substance is very little, if at all, imbibed with serosity; and, that the agminated cells will only be found on the sides and at the surface of a certain number of vessels. The same author says: "If the malady is intense,

we shall find, besides the above intensified, vast arborisations of the vessels of the dura-mater; fibrinous concretions attached to the arachnoid; collections of blood, of serosity, of pus, dispersed in the arachnoidian cavity; sanguineous effusions of the cerebral or cerebellar pia-mater; an excess of congestion, of thickening, of infiltration, of this serous membrane; adhesions, which become established between the pia-mater and the cortical substance; vast excoriations and dispersion of this same nervous substance by an excess of sanguineous injection and a softness of tissue; an induration or softening of the white central substance of the cerebral hemispheres; vast foci of profound, circumscribed encephalitis, situated in some determined region of the cerebellum, of the cerebral hemispheres, or in the auricular protuberance; softening of the central parts of the cerebrum, and sometimes lesions of the spinal cord."

If we contrast the gray substance in a normal condition with the pathological state, there will be seen eight or more vessels dividing and subdividing, thus forming plexuses where one or two vessels in the normal state would be found, thus showing an active process of new formation. Of these vessels, the larger will be seen empty; the others are dilated with globules of blood, rendering the circulation impossible. The calibre of the capillaries is almost always diminished by being exteriorly covered with molecules. These alterations are due to an intense vascularization, and to the extravasation of blastoma, in the middle of which the plastic productions finally become organized, thus profoundly modifying the cerebral parenchyma itself. The nervous cells are rare, deformed, disconnected; lose their normal character by losing their contents. The nervous tubes are now lessened and deformed by atrophy, and their contents also escape.

M. Marcé says: "The vascular lesions predominate in the acute cases of general palsy, whilst the plastic effusions, the alteration of the tubes and cells, are more characteristic when the disease has progressed slowly."

Not having time to carefully analyze the histology of the

neo-membranes, the cysts, and the granulations of the arachnoid, we can only say that they often exist; that the best theory is to consider the neo-membranes as produced by the secretion from the parietal surface of the arachnoid, and that the different appearances they may present are due to the rupture of some little vessels in them; that the granulations are produced by plastic, albuminous exudations, which are deposited on the free, serous surface as small asperities; that, as says M. Marcé, "The cysts have a variable origin; sometimes they are formed by an effusion of blood into the arachnoidian cavity, determining an inflammation of the serous membrane at the points with which it is in contact; the plastic lymph organizes around the clot, producing its cystic envelope, which after a time may acquire consistence and thickness; at other times, on the contrary, the blood, while effusing, separates a psuedo-membrane situated on the parietal layer of the arachnoid, a new membrane, forming at the superior part of the clot, completes the envelope."

Finally we may remark that the lesion of the cortical substance and the adhesions of the meninges are the capital, characteristic, histological indications of general palsy. Without dwelling longer on the pathological anatomy of this disease, we may assert that always in this malady will be found lesions of the brain and its envelopes, sufficient to satisfy any careful investigator, if he only properly endeavors to find them. It appears to me that the day has passed when the German somatists can truly proclaim, "The majority of mental diseases do not present appreciable alterations." Although our means of investigation are yet so simple as generally not to seize the the primeval cause of lesions so manifest, yet we must not despair; but, on the contrary, advance.

(*To be continued.*)

FLUID EXTRACTS.

CHICAGO, April 30, 1868.

Editor Chicago Medical Journal:

DEAR SIR:—An article in the last number of your JOURNAL entitled "Fluid Extracts," so fully opens up that subject, that a few observations upon it from a different standpoint, will probably not be uninteresting to many of your readers. All physicians — to their credit be it said — are exceedingly anxious to use the best possible remedies, and manufacturers, ever on the alert, often attempt to take advantage of this worthy zeal. One, having observed the interest manifested in those semi-sensational relations, of the wonderful effect of heat in causing decomposition of vegetable compounds, announces "Cold Expressed Fluid Extracts," with a great flourish, and many specious, with some good arguments. But, *nota bene*, the process is patented, which is a cheap, wholesale method of patenting the entire list of "Cold expressed fluid extracts." Now if the patentee can only succeed in driving the profession into the belief that his process makes better extracts than can be made otherwise, he has as perfect a monopoly in that line, as Dr. Payne has of his "family medicines." The fluid extracts to which you refer (Duffield's) are also made by a patented process, which, as before remarked, effectually patents the entire list. This view of the case, though worthy of serious consideration, is not the chief point to which I wish to direct special attention. Dr. Duffield's process, I believe, consists essentially in producing a vacuum in his percolator, and in his receiving vessel, and then allowing the menstruum to flow in, through a tube, upon the drug, whereby he gets a pressure upon his percolating menstruum of nearly fifteen pounds to the square inch, in addition to the gravity of the liquid. This method of rapidly filtering a liquid through a drug, if not new (as some broadly intimate), is certainly expe-

ditious, which I believe is its chief merit. That it avoids heat (whether judiciously or not), is the bait offered the profession.

It is well known that many substances, though soluble to almost any extent in alcohol, are very *slowly* dissolved, *e. g.*, rosin, shellac, and most resins, as well as many alkaloids and neutral principles. Is it probable that such agents will be as thoroughly removed from the drug by a few minutes' rapid filtration, as by several days' contact with successive portions of fresh menstruum? Dr. Squibb found that when alcohol was slowly percolated through 16 oz. (Troy) of *finely powdered* cinchona bark, even the *fifth pint* of percolate (tincture) contained *two and a half per cent. of the entire alkaloids of the bark!* Could the first pint obtained be regarded as a perfect fluid extract?

But Mr. Duffield says his process removes the air, and thus allows the alcohol to permeate the drug more perfectly. Now when we consider that the medicinal virtues of plants reside almost entirely in the juice or sap which circulates through the lactiferous tubes which very freely anastomose with each other, and that this network is almost wholly broken up and destroyed by the process of fine grinding, and further, that alcohol is a very mobile liquid, having a powerful affinity for vegetable matter which causes it to permeate the finest capillary tubes with wonderful force, and the rapidity of magic, we utterly fail to see the necessity of a vacuum.

Suppose that some medicinal matter is lodged in unbroken tubes, cul-de-sac cells, etc., which is even freely soluble in alcohol, how is it to be carried out most perfectly? The liquid will go into these recesses *in vacuo*, or not quickly. When once in, all *vis a tergo* ceases. Being shielded by the walls of the tube or cell, it must remain comparatively quiet, despite the rapid currents outside. Diffusion alone can obtain the medicine from these recesses, and as this process is *slow*, it follows that gradual percolation, or even prolonged maceration, is more philosophic, than this rapid filtration.

This effort to totally avoid heat has unfortunately led its

originator into another difficulty, which, if he has fully appreciated, I at least have not seen fairly stated, or even mentioned at all; viz.: the influence of a vacuum in promoting the decomposition of volatile bodies. Several mineral compounds are known to be so easily decomposed, that the presence or absence of pressure, or even of an atmosphere into which one of the constituents can diffuse itself, determines their stability, or decomposition. Following the cue of those who are so much exercised over the slight changes in composition which a moderate heat may effect, I may ask, if mineral bodies are thus separated, what must be the consequences of applying the same cause to those delicate compounds of highly volatile acids, alkaloids, æthers, oils, etc.

Aside from chemical dissolutions, a vacuum is a very prolific cause of physical separations. Liquids boil at a temperature of 145 degrees less *in vacuo* than in the open air; hence, subjecting a volatile substance to a vacuum at common temperatures (say 60° Fah.) amounts to the same thing, so far as dissipation of its substance is concerned, as heating it in the open air to 205 degrees (145+60=205). The vigorous pumping necessary to produce and sustain a vacuum, can not fail to remove considerable quantities of the most volatile parts of plants, as essential oils, ethers, etc.

I do not regard any one process as suitable for the production of all fluid extracts. Such a position is as untenable as a proposition to cure all diseases with one extract, or even the same disease under all kinds of circumstances and complications.

In the officinal processes (U. S. P. 1860), sixteen of the twenty-four fluid extracts admitted, are made by reserving (and never heating) an amount of the first tincture which passes by slow percolation, equal to three-fourths of the entire volume of extract to be made. The additional tincture obtained is evaporated by water bath to one fourth, and mixed with the reserved tincture. I modify this process, and as is believed, improve it, by reserving more of the first tincture, and evaporating the last tincture lower in a correspond-

ing degree. With good, fresh drugs, ground to exactly the proper degree of fineness, and with alcohol of proper strength, failure to obtain uniformly good and reliable fluid extracts by this process implies profound ignorance of the subject, or unworthy motives.

H. D. GARRISON.

CINCINNATI, June 1st, 1868.

MY DEAR DOCTOR:—The profession of this city are not idle, even if unusual health prevails. The activity of our Faculty, intellectually, will compare favorably with that of any portion of the West. This can in no way be better attested than by witnessing the proceedings of the Academy of Medicine, at any one of its weekly meetings. Recently an original paper was read by the President of the Academy, I. Davis, M.D., on diphtheria. Dr. Davis took the position that this disease was "epidemic sore throat," and that epi demic sore throat was diphtheria. In other words, that the terms are antistrophic.

Prof. Richardson represented the evil tendency of such a position, syllogistically. Thus — Mrs. Smith's baby has a sore throat. The baby gets well, after taking the doctor's medicine a few days, without any serious illness.

The conclusion is that the doctor has cured a case of diphtheria. The injury to the profession from this style of argument, results from the fact that most of them have taught that this disease was infrequent, and the mortality great. The discussion lasted several months, but the *points* are as stated above.

This was followed by the introduction of another matter of great importance, by Prof. James Graham, who urged the moral aspect of the question with much eloquence (would that other members of the profession entertained such sentiments of high morality!) The following, in accordance with his views, at the regular meeting, May 25th, 1868, was unani-

mously adopted by the special committee appointed to report on "procured abortions and criminal advertisements":

"The committee, to whom was referred the consideration of procured abortions, and the criminal advertising of the means and instrumentalities of producing the same, or preventing impregnation, respectfully report as follows:

"1. Criminal abortions are fearfully frequent.

"2. That as a general rule, the crime is committed by irregular practitioners of medicine, by certain female *accoucheurs*, and by apothecaries, who vend certain nostrums to correct suppressed menstruation.

"3. That we believe that the advertisement of abortionists and abortion drugs encourages the practice of abortion, and is criminal, and, therefore, the Academy of Medicine should earnestly protest against the admission by the press of such advertisements.

"4. That the Academy appoint a standing committee to fortify, as much as possible, the Health Officer in Cincinnati, in the prosecution of such offenders.

"6. That it is the duty of all good citizens, and especially physicians, to discourage the circulation and patronage of the journals in which are published the advertisements of those who profess to produce abortion, or prevent impregnation.

"J. F. WHITE, M.D.,
"JAMES GRAHAM, M.D.,
"F. G. SCHMIDT, M.D.,
"C. S. MUSCROFT, M.D.,
"JOHN DAVIS, M.D., *President*,
"JOHN L. NEILSON, M.D., *Rec. Sec'y.*

"After the report had received the signatures of the members of the Academy, Drs. James Graham, George Mendenhall, and A. M. Johnson were appointed a standing committee to carry out its provisions."

Prof. C. G. Comegys offered a minority report, which, after being read, was not received by the Academy, consequently I am unable to furnish you with a copy.

From the well known character of the gentlemen appointed on the standing committee, to give back bone to the matter, it is expected that there will be something accomplished to remedy this growing evil.

* * *

A CASE OF TRAUMATIC TETANUS SUCCESSFULLY TREATED WITH THE CALABAR BEAN.

BY A. J. BAXTER, M.D., CHICAGO, ILL.

Reported by Dr. P. Curran.

From time immemorial, traumatic tetanus, once fully established, has been considered fatal. The ancient authorities declare it to be so, and unfortunately the experience of all times has but too truly confirmed the statement — all treatment up to the present being considered empirical.

Case.

Benjamin Cleves, a member of Dearborn Light Artillery, whilst engaged in firing a salute, at about 4.30 A.M., on the 4th of July, 1867, had the front right forearm terribly mangled by the premature discharge of the piece. He was removed to a fire engine house near by, where Dr. Baxter saw him in less than thirty minutes after the accident occurred. His face and eyes were full of powder, the muscles of the forearm were very much lacerated, in some parts hanging in shreds, and the ends of some of the fingers blown off. Immediately below the bend of the arm there was an immense tumor, very tense, yet giving an indistinct sense of fluctuation, which was thought to contain extravasated blood. There was no pulsation in either the radial or ulnar arteries. The surface of the hand and arm was cold. Large splinters of wood, which seemed to be fragments of the ramrod, were imbedded throughout the arm. It having been determined to save the arm, if possible, warm water dressings were applied. He was taken to his hotel.

6.30 A.M.— He complained very much of pain. Slight circulation in radial and ulnar. Warm water dressings continued. Beef tea, one half grain of *morphine* every two or three

hours, if necessary. From this time till the morning of the 8th, every thing went along well, when Dr. B. was sent for in great haste, and informed that he was bleeding terribly from the tumor below the bend of the arm. On the doctor's arrival the hæmorrhage had ceased, and the tumor had disappeared. The blood was described as being black, thin, and offensive.

9th.—Slough had all separated; granulation looked well. Warm water dressings discontinued. Arm dressed with *Cerat. zinci carb.; Morphine* powder at night.

14*th.*—Complained of general uneasiness, or soreness; granulations looked pale and shrunken; pulse 110. Ordered California port wine *ad libitum;* beef essence and *cerat. zinci* discontinued; warm water dressings applied.

15*th.*—Did not rest well last night; still complained of soreness; countenance anxious; pulse 130; has had several spasms of the flexor muscles of the forearm, which flex the wrist forcibly on the forearm, causing much pain, which is referred to the back of the wrist. Half grain of *Morphine* every two or three hours, according to circumstances.

6 P.M.—Spasms more frequent and severer, but confined to the injured arm. Was questioned closely as to the mobility of jaws, neck, and back. Thought to be all right by having them worked vigorously. Threw twenty drops of Magendie's solution of *Morphine* under the skin over the wrist, being the point where the greatest amount of pain was complained of, with the effect of mitigating the spasms, both as to frequency and severity, for several hours. 11 P.M.—Spasms as bad as ever. One grain of *Morphia* ordered every two hours; 40 drops of Magendie's solution under the skin over the wrist.

16*th*, 8 A.M.—Worse generally. The *Morphine* does not produce the slightest impression on the spasms, which occur as often as every five minutes, causing a great deal of pain in the wrist and hand. Ordered *Gelsemin* gr. ii. every two hours; all the wine and nourishment he could take. 1 P.M. —Spasms as frequent as ever. *Gelsemin* powder every hour. It may be stated here, that henceforward, until he was quite

well, that stimulants, in the form of California port wine and beef tea, were given to the fullest extent. Mention will only be made of the medication. 6 P.M.—Very much prostrated from the effects of the *Gelsemin*; pupils dilated; vision disordered; complained of heaviness of the eyes, etc., etc.; pulse 150; spasms as frequent as ever, and more violent. Patient said he must have morphine. Ordered *Extr. Cannabis Indicæ*, gr. ii. every two hours; gr. 1½ *Morphiæ acetat.* as required to blunt the sensibility to the pain of the spasms. Threw 40 drops of Magendie's solution into the arm.

17*th*, 8 A.M.—The spasms are becoming general — worse on the side opposite the injury. Complained of soreness and stiffness about the jaws and neck, without having his attention specially called to them; thought he could not open his jaws as wide as usual. Dr. Baxter, finding the ordinary remedies prove unavailing, consulted with the leading physicians of the city, and all came to the conclusion that without amputation there could be no chance of recovery. Dr. B. amputated the arm near the shoulder; the operation partially relieved the spasms; however, the disease was making headway, when *Calabar bean* was suggested as worthy of trial. It was brought into requisition, but for some two days seemed to produce no decided effect.

Having accompanied Dr. Baxter on a visit to the patient, I found him in a worse condition than when I had seen him on a former occasion. The muscles of the neck were swollen, hard, and contracted; his jaw was nearly shut by trismus; he complained of his tongue being swollen so much as to fill up his mouth; his countenance bore a turbid, rather than an anxious appearance; his eyes seemed wearied; his friends were greatly depressed on account of his state.

Dr. Baxter requested me to remain with the patient during the night. He gave directions to have fifteen drops of the extract of *Calabar bean* administered every two hours, with *Morphine* powders of a grain each to be given in quantities sufficient to produce sleep. The administration of the *Morphine* was necessarily left to my own discretion.

About eight o'clock in the evening he was much inclined to sleep — trying to fall off into a slumber every four or five minutes, but roused from the attempt each time by a spasm of the stump of the amputated arm — the twitchings were emprosthotonic. After each spasm he would rub the muscles of the face and forehead with his hand; occasionally he would rub his eyes. Dr. Baxter injected the stump of the arm with Magendie's solution of *Morphia* before he left. I administered the *Calabar bean* according to directions, and gave the *Morphine* from time to time, endeavoring to produce its narcotic effect. At ten o'clock there was no visible change, the patient suffering pain, and very restless, requiring to have his position changed every fifteen minutes. His attendants complied with his wishes very sedulously. I shortened the intervals in administering the *Morphine*, and by twelve o'clock he seemed to be easier. I watched him very closely at this stage of the treatment, lest either the *Morphine* or the *Bean* should produce an effect greater than I desired. I found the pulse to be getting slower and fuller; he seemed to have less pain. I continued giving the *Morphine* and *Bean* regularly up to half past two, when a change for the better was visible. I now took his wrist into my hand, and held my fingers immovably on his pulse, that I might clearly understand the changes of the heart's action during the repose he was, as I supposed, about to take. In about a quarter of an hour, he, with much difficulty, really got to sleep. The spasms of the arm interrupted his slumber several times within the quarter of an hour; still sleep came on notwithstanding the twitchings. During the quarter of an hour preparatory to sleep, and the same amount of time during which he did sleep, the pulse exhibited strange phenomena. When going to sleep, a striking change in the pulsation took place. It became hard, wiry, and slow. At times it would cease for a moment, when a spasm would come on, then it would recover its action, becoming full and strong. This cessation of pulse before a spasm, and the quickness and fullness of its volume after a spasm, was invariable during the interval of distressful repose. It

appeared that the nervous system could scarcely get to rest without imminent danger of a total cessation of the heart's action. I was convinced that if the difficulty of getting properly to sleep was but fairly overcome for five minutes' time, that the great trouble in tetanus would be over. There is a physiological difficulty at the bottom of the disease. The spirit — the active principle — has suffered a loss, which it refuses to have restored.

When the patient re-awakened, he appeared conscious of having obtained a benefit; for he said to those around him: "Now that I have slept, I think that the trouble is over." He became gradually better until five o'clock, when trismus had ceased, and the muscles of the neck became pliable. I continued the same treatment throughout, until half past five, when I left, till nine. I told the attendants to administer the *Bean* as usual, and to give the *Morphine* powders in half grain doses every hour till my return. At nine o'clock he was much improved. He had taken the equivalent of sixty grains of opium during the hours I was in attendance for the first time.

During the whole of that day he was very nearly free from trismus. The twitchings of the arm would recur each time he attempted to sleep.

That night, Dr. Baxter thought my services still required, lest any untoward symptom should be manifested before morning. I strictly followed instructions that night, which instructions were, to give as little *Morphine* as possible. I administered the *Bean*, but gave no *Morphine*. The patient was very restless during the night. He wanted to sit on the chair; to have his bed adjusted and re-adjusted, time and again. Towards four o'clock in the morning he was getting worse. His pulse was 120. The spasms of the arm and shoulder were unabated, but not violent. I left at five o'clock in the morning, promising to be back at seven. When I returned, I found that the spasms became violent during my absence, episthotonos having set in with severe pain, which the patient called an agony. This occurred about six o'clock.

They had sent for Dr. Baxter. As soon as I arrived, I immediately gave a grain and a half of *Morphine*. When Dr. Baxter came, I apprised him of the condition of the patient. The doctor ordered the *Calabar bean* to be given every hour, fifteen drops at a dose, and *Morphine* at discretion. I promised the patient that by twelve or one o'clock I would have him out of his sufferings. I determined to push the *Morphine* treatment to the utmost, and if there were anodyne and antispasmodic qualities in it, to produce them. I gave a grain and a half of *Morphine* every hour, also fifteen drops of the *Calabar bean* extract — there being a quarter of an hour between the administration of each. The treatment was severe, but the case was now becoming desperate. I watched the patient closely, and found that I was gaining but little ground, till ten o'clock, when a decided improvement was observable. Dr. Baxter came about this hour. He was a little surprised at the quantities of *Morphine* I was giving; nevertheless, the effect produced was but slight. I continued the same treatment till half past eleven, when the opisthotonos and pain ceased. The patient became greatly relieved, and turned cheerful. His countenance assumed a natural and lively aspect. He conversed freely with his friends. From seven till eleven and a half A.M., I gave him the equivalent of forty-two grains of opium, without producing its narcotic effect. It was Dr. Baxter's opinion that the *Morphine* and *Calabar bean* mutually aided each other. I thereafter gave him the remedies regularly in half doses, for the purpose of maintaining the effect produced. The twitchings of the arm, from being opisthotonic, became emprosthotonic. I did not attend the succeeding night, and do not know what was the course pursued.

However, on the evening of the following day, Dr. Baxter announced to me that the patient was getting worse. I suggested a return to the *Morphine* treatment in conjunction with the *Calabar bean*. On going to see the patient, we found him suffering severe pain in the arm, shoulder, and neck. He had retrograded somewhat. I remained that night, at Dr.

B.'s request. He injected Magendie's solution of *Morphia* under the skin of the arm, and ordered a cloth dipped in a decoction of tobacco to be applied to the wound of the stump. This application evidently assisted greatly in alleviating the pain. I did not spare the *Morphine*. In four hours and a half, the equivalent of fifty-four grains of opium were given, in conjunction with the *Calabar Bean*, fifteen drops every hour and a half. At 12.50 o'clock, pain ceased; at 1.15, the patient went to sleep. Thenceforward he improved steadily till six o'clock A.M., when I left. He was under the care of Dr. Baxter from that time forward, and has perfectly recovered. I regard this case as really a cure. So much so that I felt able, during the treatment, to control the spasms and pain, calculated the time required to subdue them, and announced beforehand the hour when both contraction and pain would cease. I regulated the treatment according to the violence of the attack. The pulse was my guide throughout.

The principle acted upon was this: to regard the effect of the remedies given, not the quantity. The amount of *Morphine* and *Calabar bean* administered was extraordinary, still the nervous system, in its state of great irritability, was able to withstand it. It goes to prove that in tetanus the ordinary rules for the use of potent drugs are of no avail. I meant to find if any quantity whatever could control the disease. It was controlled. The patient is now perfectly well. The cure was due to Dr. Baxter's judicious and courageous treatment.

The formula we used was devised in haste, you will remember.

Not having time to macerate the *Bean*, we used a larger portion of spirit than necessary, perhaps, to thoroughly deplete.

To get rid of the spirit, and reduce it easily to a definite measure, we displaced the spirit with *Glycerine*, removing the evaporating dish when it ceased to lose weight.

Powdered *Calabar Bean*, . .	150 grs.
Rectified Spirits, ...	q. s.
Glycerine, ...	℥i.

First moistened the finely powdered *Bean* with a little spirit, then packed it firmly in a small glass percolator, adding successive portions (two drams) of spirit, until two ounces had passed, then displaced the spirit with the *Glycerine* in a porcelain capsule, by evaporating slowly until it ceased to lose weight.

Dose.—M xij., equivalent to gr. iij, of the powdered *Bean.*

TREATMENT OF DIPHTHERIA.

To the Editor of the Chicago Medical Journal :

Dear Sir :—In the May number of the Journal is an article from the pen of Professor Miller, which I fully endorse, for the reason that I have been practicing on the principles therein contained, and using the same treatment, for the past five years, in diphtheria, with an almost universal success, having treated seven hundred well marked cases of diphtheria, of all ages and conditions, with but a loss of ten cases. One year ago last winter I wrote a short article to the Journal, giving this exact view of the pathology and treatment of this formidable disease, but I suppose it was so directly opposed to the then received views of the profession, and the author being unknown and obscure, the communication never appeared. I was led to adopt this course of treatment by studying the pathology of the disease, assisted by old Dr. Polin, of Springfield, Ky., in a wide spread epidemic of this then little understood disease. My treatment has been adopted by my brethren of this village, and by a student of mine who graduated at Rush College last winter, Dr. R. N. Barger, with the same invariable success; and I write this with the hope of adding some weight to the testimony of Dr. Miller, and correcting the egregious errors of the profession

generally, in regard to this disease. I only differ from Dr. Miller in giving more *Chlorate of Potash*, dissolving it in hot water, and give all the stomach will bear, leaving out the *Simple syrup*, believing it to have a better local effect, and applying on the outside a warm, moist bag of salt. I have had several cases of paralysis as a sequela of this disease, which in every instance has been arrested by *Strychnine*.

Respectfully, JAMES C. BASCOM.

McLEAN, ILL., *June 5th*, 1868.

[NOTE BY THE EDITOR.—We have no recollection of receiving the article alluded to by our friend, Dr. Bascom. These is, of course, no particular novelty about this mode of treatment. Numberless practitioners have approximated it. Prof. Miller's article, and the above, are valuable as cumulative evidences of a form of successful treatment, differing, *toto cœlo*, from that suggested by DR. CONDIE, in his generally valuable work on Diseases of Children, of which notice was taken some time since.]

A CASE OF MISTAKEN DIAGNOSIS.

BY DR. WM. L. COE, MORRISON, ILL.

MY friend and neighbor, Dr. N., was called on August 5th, 1867, to see a child about four years of age, and diagnosed—dislocation of the left femur into the thyroid foramen.

The next day Dr. T. saw the child with him, and confirmed the diagnosis, but owing to disagreement as to the treatment to be adopted, there was no persistent attempt made to reduce the dislocation.

August 7, Dr. T. called upon me to assist in the reduction. After consultation with both gentlemen, I consented.

We found the patient in bed, lying upon his back, with the leg and thigh partially flexed, the knee supported by a pillow beneath it. The hip was red, hot, swollen and tender, so that we could not touch it without distressing the little fellow intensely.

We prepared for reduction, and chloroformed the patient. Upon removing the pillow, the leg was readily extended by the side of its fellow, the foot extending an inch and a half

below the right one, the leg somewhat adducted, toes inverted, but easily returned to their proper position by a very little force. The left hip was swollen and very hard about the trochanter, gradually diminishing upwards to the crest of the ilium, and downwards to near the middle of the thigh, and somewhat swollen but softer upon the internal part of the thigh and groin.

Upon applying a tape from the anterior superior process of the ilium to the internal malleolus, I found the legs of the same length precisely. On grasping the thigh firmly, and making persistent pressure upon the soft parts, I found the head of the femur wos not in thyroid hole, but *was* in the acetabulum. Of course there was no dislocation.

Now, how to account for the position of the feet.

Upon further examination, we found the pelvis presented the same obliquity, the left ilium carried downwards, and the transverse axis of the pelvis at an obtuse angle, with a line drawn through the body perpendicularly. We then turned the boy upon the face, and on tracing the spinous processes of the vertebra, found a curvature of the spine in the lumbar region, with the convexity to the left side, which explained the obliquity of the pelvis and consequent extension of the left leg and foot.

From the mother we learned that about ten days before, she had taken the child to a friend's, and while there he had received a slight injury, causing him to cry a little, but soon recovered and returned to play. The child said; "I went to *Danma's* and fell off the *teeter*." In a day or two after, he complained of his hip hurting him, and walked with some difficulty, which all constantly increased, with swelling and tenderness, until the day before Dr. N. saw him, when he became confined to the bed.

Here was the solution — a slight bruise on the hip produced inflammation of the parts, the tissues all partook of the increased action, muscular contraction became painful and was abandoned, either by an effort of the will or involuntarily, the muscles of the spine sympathized, and all became *practi-*

cally paralyzed, allowing the muscles of the right side, retaining their normal contractility, to draw the right hip upwards, curving the spine, and producing the appearances described, and well simulating the thyroid dislocation.

In a few days after this, suppuration took place, an abscess was formed in the hip just about the trochanter major, a lancet was passed in, the pus evacuated, and the boy recovered perfectly, with the feet parallel and on the same plane, the pelvis and all the parts being restored to their normal position.

I should not trouble your readers with this small matter, but that a statement of failures and mistakes often serves to fix principles upon the mind more firmly than successes, and I wish to put young members of the profession on their guard in diagnosis.

My practical application is, *Make thorough investigation in all cases, do not jump at conclusions*, and thus avoid the chagrin of confessing to the commission of blunders.

BOOK NOTICES.

MATERIA MEDICA, for the Use of Students. By John B. Biddle, M.D., Professor of Materia Medica in the Jefferson Medical College, etc., etc. Third edition, enlarged. With illustrations. Philadelphia: Lindsay & Blakiston. 1868. Pp. 384. W. B. Keen & Co., 148 Lake St., Chicago.

This is a thoroughly revised and enlarged edition of Prof. Biddle's work on Materia Medica. It is designed to present the leading facts and principles usually comprised under this head, as set forth by the standard authorities, and to fill a vacuum which seems to exist in the want of an elementary work on the subject. The larger works usually recommended as Text Books in our Medical Schools are too voluminous for convenient use. This work will be found to contain, in a condensed form, all that is most valuable, and will supply students with a reliable guide to the courses of lectures on Materia Medica, as delivered at the various Medical Schools in the United States.

CONTRIBUTIONS RELATING TO THE CAUSATION AND PREVENTION OF DISEASE, AND TO CAMP DISEASES; together with a report of the diseases, etc., among the prisoners at Andersonville,

Ga. Edited by Austin Flint, M.D. New York: Published for the U. S. Sanitary Commission, by Hurd & Houghton, 459 Broome St. 1867. Pp. 667.

Prof. Flint, in this compilation, has discharged his editorial duties with his usual ability and fidelity. We shall take great pleasure, so soon as the pressure on our columns will admit, in commenting on this very useful work. Meanwhile, we commend it to the careful perusal of our readers.

THE AMERICAN JOURNAL OF OBSTETRICS, AND DISEASES OF WOMEN AND CHILDREN. Edited by E. Noeggerath, M.D., Physician to the German Hospital and Dispensary, and B. F. Dawson, M.D., Lecturer on Uterine Pathology in Medical Department of the University of New York. $3.00 a Year, in advance; Single copies, $1.00. Moorhead, Bond & Co., Publishers, No. 60 Duane St., N. Y.

The first number of this Journal was issued on May 15th, 1868, and it will be published quarterly thereafter. It consists of 96 pages, elegantly printed, and contains Original Articles, Reports of Societies, Hospitals, Lectures, and a complete review of Foreign and Domestic Literature of the above subjects. Articles for the Journal, and subscriptions, are solicited, which, together with all communications, are to be addressed to the Publishers.

The initial No. has been received, and fully sustains our expectations. The Essay by Dr. Jacobi, on the Pathology and Treatment of Croup, alone is worth more than the annual subscription price.

EDITORIAL.

CORRESPONDENTS will accept our sincere thanks for their favors, but must excuse a little delay in their publication. Each accepted will appear at the earliest possible period.

The unexpected length of Dr. Bosworth's article compels us to reserve the remainder until next number.

Dr. Baxter's case of Tetanus, treated by *Calabar Bean*, will attract general attention. We believe, at its date, it is the fourth case reported. The reporter, Dr. Curran, does not state, what we understand to be the fact, that the use of the *Bean* was suggested by Prof. Gunn. The Editorial impression is that the result is balanced between the *Morphine* and the *Bean*. This is *Nota Bene*.

The Apostle thinks the excessive amount of labor expended by the Faculty of the Reform School is such that it will not do to *elevate* the fees. A combination is anticipated with the Vinegar Factory.

PROCEEDINGS OF THE PEORIA COUNTY MEDICAL SOCIETY.

A MEETING of the Society was held at Princeville, May 15th. The President, Dr. G. L. Corcoran, in the chair.

Dr. R. F. Henry was chosen Secretary *pro tem.*

The minutes of the previous meeting were approved as reported by Dr. J. K. Secord.

On motion, Drs. Allen, Thomas, and Wilmot, of Chillicothe; Charles, Andrews, Emery, and Henry, of Princeville; and Lane, of Tivoli, were elected members of the Society.

Drs. H. Steele and G. L. Corcoran were appointed delegates to the Illinois State Medical Society, to meet at Quincy on Tuesday next; Drs. R. F. Henry and G. W. Emery, Alternates.

The subjects proposed for discussion at the next meeting — Uræmia, and Type Fevers.

The Sectetary was instructed to furnish a copy of the proceedings of this meeting to the CHICAGO MEDICAL JOURNAL, and the Peoria and Elmwood papers, for publication.

On motion of Dr. Steele, the Society adjourned, to meet at Elmwood on the second Wednesday of July next, at 1 oclock, P.M.

PRINCEVILLE, ILL., *May* 15, 1868. R. F. HENRY, *Sec'y.*

THE LATE DR. R. T. RICHARDS.

AT the annual meeting of the DeWitt County Medical Society, held on the 11th day of May, 1868, Dr. C. Goodrake, from the committee appointed to draft resolutions expressive of the sense of this Society on the death of our late colleague, Dr. Richards, reported the following preamble and resolutions, which were unanimously adopted:

Whereas, It has pleased God, in His wise Providence, to remove from our midst, and from a field of great professional usefulness, our highly esteemed friend and co-laborer in the science and practice of medicine, Dr. ROLLA T. RICHARDS, who died at Santa Anna, on the 12th day of March, 1868; be it therefore

Resolved, That we deeply feel the loss of our deceased friend and brother, who, by his upright, moral conduct, and gentlemanly deportment, had endeared himself to all with whom he became associated.

Resolved, That in his death, the profession is deprived of one of its most zealous and devoted members, and the community of a *good physician*, and one of her best and most patriotic citizens.

Resolved, That we feel a sincere sympathy for his widow in her great affliction, and can only refer her, with unfeigned confidence, to Him who has promised to be the widow's God.

Resolved, That the foregoing preamble and resolutions be spread upon the records of the Society; an attested copy sent to the widow of the deceased, and one to each of the medical journals published in Chicago, for publication.

C. GOODBRAKE,
J. WRIGHT, } *Committee.*
Z. H. MADDEN,

J. A. EDMISTON, M.D., *President.*

C. GOODBRAKE, M.D. *Secretary.*

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—JULY 1, 1868.—*No.* 13.

PROGRESSIVE PARALYSIS OF THE INSANE.

(PARALYSIE GÉNÉRALE DES ALIÉNÉS OF THE FRENCH.)

BY A. W. BOSWORTH, M.A., PARIS, FRANCE.

Thesis for the Degree of M.D., Presented to the Faculty of the Rush Medical College, Chicago.

(*Concluded from page* 392.)

DIAGNOSIS.

IT is the imperious duty of the careful physician not to make too suddenly his conclusions. Nothing is more annoying than to learn that our judgment was erroneous. Nothing more embarrassing than to be able to early distinguish this sad, fatal disease from some other forms of mental derangement. In cases of doubt, then, let us learn not to be too hasty.

Usually the most difficulty will be presented in distinguishing general paralysis from that form of insanity known as simple mania, when, especially, assuming an ambitious character. As soon as we find a patient divulging ambitious delirium, we must be on our guard, remembering that this tendency is, in the immense majority of cases, closely connected with lesions of motility. All authors usually admit that mania of an ambitious type may exist independently of being

connected with those terrible indications which truly reveal to us the fatal termination of general palsy.

Consequently, if our patient, with his agitation, irascibility, and ambitious ideas, does not present impediment of speech, or trouble of motility, we must carefully become informed concerning his antecedents and the circumstances which preceded the beginning of his disease. By thus searching, we shall find, if we have to do with a case of general palsy, that before the manifestation of ambitious delirium, memory was diminished; and, in fact, all the symptoms of intellectual weakness may be recognized. Especially should we ascertain if the patient has been subject to cerebral congestion, followed by difficulty in speaking.

M. Calmeil says: "We must not hasten to pronounce a diagnosis from a simple impediment of speech with or without delirium, because this may possibly arise from a deep inflammatory focus with or without a clot of blood in the cerebral substance." Ambitious monomania of the paralytic is easily distinguished from ordinary ambitious monomania. This latter is rare; the person affected with it, taciturn and morose at the beginning, realizes that he is ill; fears that he is going to lose his reason; and, at first, endeavors to banish the delirious ideas which he knows to be absurd. Later, mastered by the delirium, he conforms himself to his ideas; he imitates the character or person he has chosen; his actions and words seem consistent with the position he believes himself called to fulfill. If he considers himself general, or king, then does he use terms suitable for his illusory dignity.

Hallucinations, rare with the paralytic, are, on the contrary, common to him.

Nothing similar is seen with the victim of general palsy. His ideas are not only absurd, but they are very changeable. He, while king, and at the same moment Pope or President, speaking of his millions, will acknowledge his profession, however humble it may be, and declare he has only a few cents in the world.

The ordinary ambitious monomaniacs retain for years their

systematically organized delirium, while the paralytic is continually, day by day, hour by hour, changing his absurd ideas. Finally, the absence or presence of trouble of motility, the whole course of the two diseases, are too well known to be here longer considered.

To distinguish general palsy from simple dementia, we must remember that this latter impaired mental condition occurs consecutive to some other cerebral affection, existing even for years, as from melancholia, or mania; and that by slow gradations the mental faculties have become confused, and at length obliterated. Although here we may find abolition, more or less apparent, of the intellectual, sensitive, and voluntary faculties, yet when we recall to mind that paralytical dementia has not been preceded by any mental affection; that in a few weeks, or a few months, it is so apparent as to be recognized by slight observation; that without delay there is the appearance of delirious ideas, either ambitious or melancholic, we hardly need to be obliged to base the diagnosis on the presence or absence of difficulty of speech, or trouble of motility.

In speaking of insanity, Dr. Aitken says that melancholia comes next in frequency to mania, and that the melancholic and stupid are most frequently cured or improved. Such being the case, it behooves the physician not to confound the appalling disease of general palsy of a melancholical form with melancholia of a stupid nature. To well found the diagnosis in some cases is often perplexing, as the delirious ideas are the same; dementia in both often very similar; and the stupor is accompanied with trouble of motility. We must carefully ascertain the antecedents; give especial attention to their being, or having been, cerebral congestions; and all the precursory symptoms of general palsy must be held in mind to contrast them with our doubtful case. We shall find, if the patient is laboring under general palsy, that his melancholic or hypochondriacal delirium has not only its characteristic absurdity, but occasionally there will be seen, if only momentarily, yet of vast importance, some ambitious ideas, as

of immense wealth, or great fame, gliding into his train of lamentation, fear of death, or a curious state of imagined metamorphosis.

Dr. Aitken nowhere states that the absurd delirium of simple melancholia divulges the complication of ambitious ideas. M. Marcé says: "In simple melancholia the delirium, although monotonous, does not offer the same appearance of absurdity, and never is complicated with ambitious ideas."

In simple melancholia, when the stupor is intense, involuntary evacuations may occur at the very onset, while in general palsy they only slowly and progressively arrive. In melancholia, as soon as there is stupor, there is directly slowness of movement, and muscular weakness, which present a contrast with the energetic, yet stiff and badly co-ordinating movement of the paralytic during the first period. In every doubtful case the only duty, though sometimes annoying, is to delay the diagnosis till something may occur to throw light on the subject.

Not having time to lengthen this part of our subject, we will only mention that many of the inexperienced have often taken for an epileptic attack, apoplectiform or epileptiform congestions caused by general palsy; that cerebral softening, when situated in the central parts, or occupying both hemispheres, so closely presents symptoms allied to general palsy, that sometimes a *post mortem* has only revealed its true nature. Even in such cases, good authorities state that no ambitious ideas are ever seen.

Treatment.

The physician, once feeling sure as to his diagnosis, has an important part to play in regard to the doubts and fears of the patient's relatives and friends. It is useless to here endeavor to indicate how he must comport himself; only we would remark that this disease opens to him a wide field to employ a large amount of good sound judgment and advice. Let us be cautious not to be led astray, nor allow friends to be misguided by remissions. Notwithstanding we are sure as to the

final result, yet it is our duty to mitigate the patient's sad state as much as is in our power, and ever to seek to obtain those remissions which somewhat resemble the quiet, fertile spot in the arid desert. The mariner, tossing to and fro at the mercy of wind and waves, would gladly hail a calm though he were sure it was to be followed by a tempest that would certainly engulf him.

We must remember that however bad may appear the condition of our patient, yet at the eleventh hour has often come a change, making the victim, as it were, a new man — alas! to fall again. The possibility of the terrible symptoms disappearing to a great degree, and of this mad destroyer's lulling in its course for a time, should ever be sufficient to encourage the physician, were there nothing else to cheer him on.

As soon as possible, the patient should be removed to some quiet, comfortable, well regulated asylum, where he may be removed from the busy scenes of life, and the cares of his profession. We must counsel friends that the sooner this is done the more chance the patient has; and the longer it is delayed the more rapid will be his disease; and that left alone, he will commit, sooner or later, some scandalous or dangerous act at an unexpected moment.

When once the patient is confided to the physician, then he must ever have uppermost in his mind that, though he is not to effectually annihilate its progress and march, yet he now has to work; as has well remarked M. Calmeil, "Its degree of gravity depends on the extent of cerebral surface the disease occupies, whether in width, length, or depth."

Now must we bring into play all the resources of good hygiene, by furnishing sufficient alimentation, but not too rich in succulent, animal aliment. At an early hour must attention be given to not allowing the circulation to be so active as to produce congestion of the nervous centres. If the patient is robust and plethoric, we may employ local bleeding to a moderate degree by the application of leeches to the nasal fossæ, anus, neck or ears. The cupping glass may be used if more convenient. If we desire to recall an ancient hæmor-

rhoidal flux, or the suppression of the menses, the leech should be applied at the anus or vulva.

If the tendency to cerebral congestion is accompanied with agitation, petulance, or furor, it will be well to often employ baths, which may be prolonged three or four hours, according to necessity. The cold water bath by affusion, the sulphurous bath, and others which prompt reaction of the circulation towards the surface of the body, are preferable to quell the hyperæmic state. During and after the bath, application of cold compresses to the head is strongly recommended.

Continued attention must be given to the alimentary canal; constipation in this disease is constantly present, and also tends to increase congestion. To counteract this latter, the salts of soda and magnesia, and castor oil, are greatly in favor. Jalap alone, or with calomel, is much used.

The use of opium and other narcotics is questionable as to rendering service, and should, if used, be carefully employed. If the disease has assumed the form of melancholia or dementia, then we must be cautious in the employment of bleeding, possibly putting it completely aside; cathartics here, as in other forms, are often necessary. If the patient is troubled with torpor, but is not too much reduced, often the application of a moxa or a cautery is beneficial.

In some cases there is such a degree of anæmia, produced by melancholia, refusal of food, or various excesses, as to require the use of tonic treatment instead of depletion. Cod liver oil, iron, and quinine, then are useful. M. Marcé, at Bicetre — a hospital at Paris — has profitably used iodine and arsenic in small doses, when the digestive organs were inactive.

The activity of the antiphlogistic system should be lessened when the loss of memory, obliteration of the mental faculties, and difficulty of speech continue to increase, as we then see that the malady is attacking new regions in spite of all our endeavors to prevent it.

Now, as the second and third periods have arrived, the cerebral substance being disorganized, all we can do is to admin-

ister to the wants of the patient; sustain him as much as possible, by hygiene; give proper attention to the bowels, using all possible means to preserve his person and clothes in a clean condition, thus endeavoring to avoid, as long as possible, the formation of eschars; if necessary, use the catheter in case of urinary retention; compel the persons attending to give him such food, in so fine a state, that there shall be no accidents from imperfect mastication and difficult deglutition.

When congestive attacks assume an apoplectiform or epileptiform nature, and there is immediate danger, then must the usual means be employed to dissipate the momentary danger.

From the beginning to the fatal termination, let kindness rule in every word and every action.

EXPERIMENTAL MEDICINE.

Experimental Researches into the Subject of the Action of Phosphorus upon Living Tissues. — Reflections upon the Pathogenesis of Fatty Transformations. *By* Dr. L. Ranvier, *Paris.*

TRANSLATED EXPRESSLY FOR THE JOURNAL, BY WALTER HAY, M.D., CHICAGO.

SECOND SERIES OF EXPERIMENTS.

Experiments 4, 5, and 6.—On the 15th of October, I placed similar bits of *Phosphorus* under the skin of the loins of two other frogs; I killed one of them on the 23rd, and the other on the 28th, In neither of them were any inflammatory phenomena in the vicinity of the *Phosphorus.* In the first, there were observed yellowish plates and striæ upon the surface and in the interior of the liver; at these points the hepatic cells were loaded with fatty granulations. In the second the liver was completely degenerated.

A sixth frog was poisoned by the very same process on the first of December, 1866, and exhibited to the Society on the fifteenth of the same month. It presented no inflammatory phenomena in the neighborhood of the foreign body, and the fatty transformation of the liver and kidneys was very complete.

In order to establish the value of these experiments, it was necessary to insert under the skin of different frogs, fragments of inert substance, and to ascertain if they determined around themselves congestions, exudations, or neo-plasmata. This I accomplished in a sufficiently large number of animals, and ascertained that the presence of an inert foreign body, such as a little pebble, or a fragment of thread, placed in the lumbar region of the frogs, produced very speedily congestion, exudation, and even hyperplasia of the conjunctive tissue of the aponeurotic envelope, and of that which accompanies the cutaneous nerves; to such a degree, that at the end of three or four days, the foreign body is completely enveloped by a mass of new formation. Moreover, a variable quantity of serosity accumulated under the skin. None of these phenomena, as has been seen, are produced around a fragment of *Phosphorus*.

Experiment 7.—On the twenty-fourth of September, 1866, I introduced, by means of a sub-cutaneous incision between the ears of a young rabbit, a fragment of *Phosphorus* of seven millimetres in length, by two in width and thickness. Next I removed the os calcis of a new-born rabbit, and placed it in the right flank of the first rabbit. On the following days no inflammatory phenomena supervened, on the side of the phosphorus, whilst at the point where I placed the os calcis I determined the presence of puffiness and tenderness upon pressure. Matters remained in this state until the fourth of October. At this date I killed the animal, and ascertained that the engrafted os calcis was surrounded by a thick, whitish deposit of two to three millimetres in extent, formed of embryonic cells. Sanguineous vessels ramified already in this deposit, which later, as I have determined by other experiments, would have given origin to more perfect tissue. In

the vicinity of the *Phosphorus* nothing similar was recognized; moreover, the *Phosphorus* had preserved its transparency, and its volume was not diminished by an appreciable quantity, whilst the connective tissue circumjacent did not appear to have undergone any modification; it was not hyperæmic, nor infiltrated by exudation. Examined with the microscope, it appears with its fundamental fibrillated substance. These cells at some points were more developed than is usual, but there was no very evident proliferation. The liver, the kidneys, the muscles, had not undergone fatty degeneration, which was probably due to the fact that the toxic substance had not been absorbed in sufficient quantity.

In order to give its entire value to this experiment, I should add, that I introduced into the sub-cutaneous cellular tissue of different rabbits, inert foreign bodies, and constantly established, at the end of a few days, suppurative inflammations.

And if, in this experiment, I introduced under the skin of the animal on one side a fragment of *Phosphorus*, and on the other a portion of living tissue, I did so in order to give the greatest possible value to the experiment, since an animal graft made with care rarely entails suppurative inflammation.

Experiment 8.—The tenth of December, a fragment of *Phosphorus* was placed under the scalp of a Guinea pig, the hair of the region having been carefully cut away.

On the following days no swelling was established, and pressure determined no pain. This condition of affairs existed up to the 24th of December; on that day the animal died accidentally. In the vicinity of the *Phosphorus* there was neither hyperæmia nor exudation; however, the surrounding connective tissue had undergone a slight thickening, and it was determined by the microscope that the number of the cells was notably increased. The different organs presented no alteration.

In this case, in the vicinity of the *Phosphorus* slight evidences of irritation were observed, but they were very much less than those determined by the pressure of inert bodies.

In these different experiments, fragments of *Phospho-*

rus and of other foreign matter were placed simultaneously in the same animal, or in different animals of the same species. In none of these experiments did *Phosphorus*, in its pure state, deposited in the midst of the tissues, and out of contact with the external air, determine around itself any such inflammatory phenomena as those produced by inert matters. Whilst a fragment of *Phosphorus* introduced into living tissue represents, by its persistent, angular form, and by its consistence a veritable foreign substance; it should, like it, determine inflammatory phenomena, if its action as a foreign substance were not counterbalanced by its specific action. This action, which removes from the cells, at least in part, the property of undergoing formative irritation, should therefore be considered as contra-stimulant. It can therefore to-day be no longer admitted that the fatty transformations which supervene in the liver, the kidneys, the muscles, etc., under the influence of *Phosphorus*, are due to the irritant action of this substance. It becomes necessary to resort to other explanations.

There are met with in science three other theories: that of G. Lewin,* which consists in the admission that *Phosphorus* introduced into the digestive canal suppresses entirely the absorption of fat by the chyliferous vessels. The veins would act vicariously for them, and the chyle would penetrate the vena porta, and be carried directly to the liver. The cells of this organ brought into contact with a blood loaded with fat, would become infiltrated therewith. This theory rests upon exact facts.

Indeed, animals to whom phosphoretted oil has been administered, killed from three to four hours after the injection of the toxic substance, have their chyliferous vessels filled with a serous liquid, whilst the portal vein contains blood loaded with fine fatty granulations. It is possible even to administer to the animals *Ether* with the *Phosphoretted oil* without diminishing the transparency of the chyliferous vessels. This

* Lewin, Etudes sur l'empoisonnement par le *Phosphore*, Arch. de Virchow, 2nd Série, t. 1, 1861.

experiment, which I have reproduced many times, demonstrates that the *Phosphorus* has a powerful action in preventing absorption by the lymphatics of the intestine, for, as M. Claude Bernard* has taught us, *Ether* has the remarkable property of stimulating the absorption of fats by the chyliferous vessels.

This theory of G. Lewin would be satisfactory if the *Phosphorus* introduced into the digestive canal determined fatty transformations in the liver alone, it was formulated by its author at an epoch when it was not known that the fatty transformation involved a great number of organs, might be generalized for all the lymphatics the idea of Lewin concerning the action of *Phosphorus* upon the lymphatics of the intestine, and maintain that if *Phosphorus* determines fatty transformations in different organs, it is because the lymphatics having for their function the resorption of the fat which the elaborated, physiologically, are impeded in this function. But as will be perceived, this would be a substitution, for the hypothesis of Lewin, of another hypothesis in support of which not one fact exists.

The second theory is that of Munk† and Leyden. These two authors having observed that different inorganic acids and certain substances such as *Arsenic* and *Antimony*, as well as *Phosphorus*, determine fatty transformations (polyorganic), were impressed with the idea that these toxic steatoses were the result of the destruction of the red globules of the blood.

In order to demonstrate the inaccuracy of their mode of observation, it suffices to poison frogs with *Phosphorus*, and then, whilst they are still living, to study their circulation by the aid of the microscope. It can thus be established that the red globules which circulate in the capillaries of these animals have undergone no modification in their color or in their form. I have repeated this experiment several times, and it

* Cl. Bernard, Leçors sur les effets des matoéres toxiques et medicamentences, 1857.

† Munk and Leyden. Dir aerzte *Phosphovergiftung*, etc. (Rücksüht auf. Path. u. Phys., 1865.

has always given me negative results. Moreover, with M. Demonchy we have determined that in frogs poisoned with *Tartar emetic* or *Arsenious acid*, the blood had sustained no morphological alteration; and yet the liver and kidneys of these frogs were in a state of complete fatty transformation.

I have frequently examined the blood of rabbits and cats poisoned by *Phosphorus*, and have never been able to distinguish any alteration of the red globules which could be attributed to the poisoning.

We now come to a third theory, consisting in the claim that phosphorus determines fatty transformations by reason of a specific property. Upon the side of this prudent reservation M. Larcereaux* ranges himself.

In truth, in the present state of science it is difficult to explain the transformations which supervene upon poisoning by *Phosphorus*; but what strikes our attention is this: that amongst toxic substances *Phosphorus* is not the only one which determines fatty degenerescence. It should not therefore be claimed for it that it possesses a specific action, and hence one is induced, by the example of Munk and Leyden, to seek the relations between phosphoric steatoses and other fatty degenerescencies.

This brings me to the second part of this work: to the pathogenesis of fatty transformations, and especially to their relations with the inflammatory process.

We have seen Virchow maintain that inflammation can extend itself into the muscles and into different parenchymata by means of a fatty degenerescence of the histological elements.

In a final stage of neo-formations, inflammatory or otherwise, a fatty transformation of the cells supervenes habitually. Does it follow that this transformation appertains to a developmental movement which characterizes inflammation? Assuredly not. It is seen also in the numerous experiments of Virchow that fatty degenerescence is a process essentially passive. It is then incomprehensible how this illustrious

* Loc. cit.

professor can maintain that in certain cases inflammation, a phenomenon essentially active, could be characterized by fatty transformations.

Facts sufficiently numerous show, moreover, that inflammation and fatty degenerations, in place of being connected in an intimate manner, are, on the contrary, in opposition. In the phlegmon of sub-cutaneous cellular tissue, the adipose cells lose the fat which they contain, their nuclei and the little mass of protoplasma which surrounds them, originate by division to a very abundant production of cells, which fill up the old adipose vesicle. In acute osteitis the adipose medullary is seen to transform itself into embryonic medulla by an identical mechanism.* In acute or chronic arthritis, the cartilaginous cells, which physiologically contain fat, are deprived of it during the time whilst the cellular proliferation persists. This disappearance of the fat in the elements which contain it in a physiological state is met with not only in the inflammatory process, but also in all the active neo-formations. Then, when the neo-plasmata which constitute tumors take their point of departure in the cellular-adipose tissue or in the medulla of bone, they determine the disappearance of the fat in the cells which they involve.

But, a still more important fact: when under the influence of a pathological cause the fatty transformation has invaded certain cells, it is seen that these cells can rid themselves of the fat which they contain under the influence of inflammation, if at any time it should supervene before the cellular elements may have been completely destroyed by degeneration, as results from investigations which I have made into the alterations of diarthrodial cartilages in white swellings.†

However, at the end of the inflammatory process, and in the last phase of every neo-formation, a fatty transformation of the elements, at that time superabundant, is observed.

* Des alterations des cartilages dans les tumeurs blanches. (Bull. de la Soc. Anatom., 1865.

† L. Ranvier, Considiration sur le developpement du tissu osseux, etc., 1865.

This transformation should not be attributed to an imitative process, but entirely to an alteration of nutrition, for it never supervenes at the moment when the cells are in full proliferation. It happens only at the time that the formative movement is arrested, and that the nutritive exchanges become difficult for the elements whose number is no longer in relation with the vascular development. On the first day of a catarrhal inflammation, the exudation is transparent, and the numerous cells which it contains show themselves with every indication of a very active multiplication, and do not contain a single fatty granulation. Later, when the exudation becomes yellowish and opaque, nearly all the cells enclose granulations, and even some little drops of fat.

It will be remembered that, in the month of September, frogs accumulate fat in their muscles. This fat is probably destined to nourish the animal during hybernation — it is known, indeed, that the frog has no sub-cutaneous adipose cellular tissue — it accumulates fat in the great epiploon and in the muscles. It was interesting to see whether an irritation directed to the fatty muscles of the frog could diminish or remove the fatty granulations, granulations arranged like beads between the elementary fibrillæ. To determine this result, I passed threads through the muscular masses. I effected fractures, and established the fact that from the fifth to the eighth day the fatty granulations had considerably diminished with having completely disappeared in the portion submitted to the irritation. It is probable that this result would be more or less rapid, according to the season of the year, and according to the temperature. My experiments were conducted upon six frogs; four have had the femur fractured; three only were killed from the sixth to the eighth day. In the cases of two of those which had sustained fractures, I awaited the twentieth day, until there had been a commencement of a callus; in these, a limited number of muscular fibres were comprised in the cartilaginous mass, and had undergone complete fatty degeneration. In the last, which was examined twelve days after the experiment, the muscular

bundles in the neighborhood of the thread upon whose passage there had been an abundant cellular neo-formation, had commenced also to undergo fatty degeneration; in these last cases the fatty transformation ought not to be interpreted by the inflammation, but very much rather to the hindrance sustained in the nutrition of the muscular fibres by the presence of tissues of neo-formation between these fasciculi.

I come now to the part the most disputed, and in fact the most difficult of fatty transformations. Whence comes the fat which infiltrates the histological elements? Is it already formed in the blood which merely deposits it in the cells? Does it originate, as there is much evidence to show, from a direct transformation of the albuminoid substance which forms the protoplasma of the cells? Is its accumulation in the cells the result of a deposit or of an exaggerated formation, or, indeed, is not the fat formed physiologically, consumed just in proportion as it is produced? Finally, it may even be asserted that the fatty matters contained in the cells are taken up, little by little, by absorption, and an impediment applied to this function would thence determine a fatty accumulation. It is not my intention to reply to these different questions which have been already disposed of partially, and very imperfectly resolved by Wagner, Mideldorf, Witich, Virchow, etc.; but I desire at present simply to adduce some new evidence. The microscope does not always suffice to detect fat contained in organic liquids or histological elements. Thus in the blood no fatty granulations are recognized, whilst it contains fat in notable quantity. Fatty matters enter into the composition of the red globules in the proportion of 18 to 25 per cent.,* and yet no fatty granulations are to be distinguished in the globules.

These fatty matters, which can not be discovered by the microscope, as is very well established for the red globules of the blood — very probably because they are combined in an intimate manner with other constituent matters, can resume

* Pelonze et Frèmy, Traitè de Chimie, générale, tome VI., 2d édition, p. 100.

their form and characteristic reaction under certain conditions; when the blood has escaped from the vessel, and remains in an accidental receptacle, it is observed that the red globules become decolorized, abandoning their hæmatosine, which is dissolved in the surrounding liquids or concretes in the form of granulations or crystals; moreover, these globules become spherical, lose in the direction of their larger diameter, which falls to five ten thousandths of a millimetre; then is perceived, forming themselves under a membrane which seems to envelop them, some fatty granulations disposed like a string of beads; these granulations are insoluble in acetic acid, and have all the optical characteristics of fat.

In this case I would say that the fat was masked in the globule, and that it had become apparent at the end of chemical transformations as yet badly defined. I will not maintain, with Förshер, that a protein substance is transformed into fat.

This theory of fat masked can explain many facts; it is in relation with certain very interesting phenomena which occur in the bodies of fœti which, after having died, have remained from one to three weeks in the uterus.

During the past year I have been able to collect five of these fœti, which I have studied carefully.

In regard to the question which occupies us now, they presented identical modifications, which will obviate the necessity of making special observations upon each one of them.

The blood contained fatty granulations; in four of them the red globules were entirely destroyed; in the fifth a few were recognizable. In the nerve tubes the myelene was fragmentary, and one would have said that the nerves had degenerated after section. In the nervous centres nothing more was found than a semi-fluid mass of fatty granulations, crystals of fat, and cholesterine. The nervous cells alone were intact, and contained no fatty granulations. The liver contained great quantities of fat, and the hepatic cells were destroyed: the epithelial cells of the renal tubuli contained very distinct fatty granulations. The cartilaginous cells of

of the ossific layer, which in the physiological state contain no fat, apparently, at this period of life, contained from one to five fatty granulations. The primitive fasciculi of the muscles of the trunk and of the limbs, the fundamental substance of the cartilages, the cells of the connective tissue, the fundamental substance of this tissue, contained in no case fatty granulations. On the other hand, the muscular fasciculi of the heart were all loaded with it.

From these facts it must be concluded that albuminoid substances do not give origin to the formation of fat when they are abandoned to themselves — that is to say, when they are deprived of life — for if it were not so, it would be impossible to comprehend how the substance of the muscles of the limbs, placed under the same conditions as the muscles of the heart, does not give origin to the formation of fat, whilst in these last, fatty granulations appear. Moreover, the formation of fatty granulations in the cases which we are now discussing is limited actually for each histological element. Some few granulations only show themselves in the cells of the cartilages; they are a little more abundant in the cells of the kidney, they are out of all proportion in the liver; and, finally, in the nervous system, they seem to originate directly from the medullary matter; for the fibres of Remak, so abundant in the fœtus, contain here no fatty granulations. I perceive but one mode of explaining these different facts: it is by the assumption that the fatty matters combined more or less feebly with the albumenoid matters are more or less abundant according to the different histological elements. These fatty matters are masked in the different tissues whilst living, and disengage themselves, little by little, after death. It is easy to perceive how interesting would be the results of chemical investigations made in this direction, but I am not yet in a position to give positive results upon this subject. We have, however, only an hypothesis based upon certain facts, and which I hope to demonstrate completely in another work.

It is now apparent why certain elements involved in necrosis might give origin to fatty granulations, without necessi-

tating the intervention of a direct transformation of albuminoid matters into fat. But these fatty granulations would be in this case limited in number; as in the conditions in which much fat originates in the cells. It is necessary, therefore, to seek the aid of a deposit more considerable, a greater elaboration, in default of assimilation or absorption.

If we recur now to the interpretation of fatty transformations in poisoning by *Phosphorus*, resting upon the experiments contained in this memoir, experiments which demonstrate that *Phosphorus* impedes nutrition and the multiplication of cellular elements, to such a degree that the phenomena of inflammation can no more develop themselves, we will understand how these elements can no longer elaborate the fat which they contain in a masked condition, or that which is brought to them by the vascular system.

What corroborates greatly this view of the matter, is that in poisoning by *Phosphorus*, the first organs involved in the fatty degeneration are the liver, the kidneys, and the heart, organs in which fat is recognized in the fœtus which has remained dead for some weeks in the cavity of the womb.

Conclusions.

The protoplasma of the cells appears to be the seat of the exchanges, and of the elaboration of the material carried by the blood; it is likewise in the protoplasma that the fat is first deposited.

The presence of fat in a cell which contains none of it apparent, in a normal state originates from the fact that the nutritive process in the cell is retarded. If this movement is stimulated by irritation, the fat disappears.

Since certain cells manifest great activity in the elaboration of fat, it does not result from this that they form it at the expense of available substances which traverse them; for the blood contains fat in a masked condition — that is to say, in a state of combination or of saponification. The adipose cells, those of the liver, for example, appear to reduce the combined fat to a neutral or insoluble condition.

In the case of the fœtus, dead, and remaining for some time in this condition in the uterine cavity, the masked fat becomes apparent to the microscope in the liver, the kidneys, the heart, and the cartilage cells.

Phosphorus determines fatty transformations because it diminishes the nutrition of the histological elements, because it is a contra-stimulant to these elements, a property demonstrated by the experiments detailed in this memoir.*

CASE OF SELF MUTILATION.

BY CURTIS T. FENN, M.D., CHICAGO.

G. S., aged 25, born in New York, a farmer, was admitted to the County Hospital, January 25th, 1868, in a condition of exhaustion. A portion of his clothing was saturated with blood. Examination showed that he had been castrated recently. His wounds were filled with fresh coagulum; and adhering to the clots of blood in his pantaloons, were two rude clamps of green sapling, tied with waxed end. He refused to answer any questions regarding himself; and it was, therefore, surmised that some rural outrage had been thus unmercifully revenged, at the hands of unknown swains. The natural simplicity and innocence of the man, made this

* Since this memoir was drawn up, there has appeared in the Archives de Virchow, a memoir by Dr. Bernhardt upon the alterations of the stomach in poisoning by *Phosphorus*. This author quotes nearly all the observations published in France or Germany, in which the state of the digestive organs of those poisoned fatally by *Phosphorus* had been noted. He adds to it some personal observations, and arrives at this conclusion: that *Phosphorus* does not ordinarily determine inflammation of the gastric mucous membrane.

When this inflammation occurs, it must be attributed to the presence of gas in the stomach at the moment of the ingestion of the *Phosphorus*. This body would then be oxydized, and would occasion the production of *Phosphorus* and phosphoric acids, which alone could act as caustics.

appear doubtful, however. At length, he acknowledged to have committed the act himself; and gave the following history:

He had been inclined to solitude from childhood, and, at times, addicted to self-abuse. He was generally impressed with the idea that he should not be able to rid himself effectually of the habit, till he was castrated. He became afflicted with spermatorrhœa; and, although he felt well and strong, applied to the doctors for a cure, to no purpose. At length, one agreed to perform the operation, at his own request; but required a fee to begin with, which was more money than he could pay. With sublime hardihood, he now resolved to castrate himself, and so to obtain a deliverance which he considered essential to his future happiness. He ground two quadrilateral bits of iron to a cutting edge, and inserted them, an inch apart, into a block of wood. This instrument, he intended for making two separate parallel incisions at once, each to be two inches long. After a month's preparation, all was ready. His procedure then was as follows: For better concealment, and as like to receive more care when he should need it, he came to the city. The morning after his arrival, he seated himself astride an old trunk, in the upper story of his hotel, and contrived to spread his scrotum upon a surface of wood, placed between his thighs, and fasten it there. Taking the implement in one hand, he cautiously and deliberately rested its edges upon the stretched integument, and struck down upon it with a large stone, held in the other; thereby severing all the coverings of both testicles. He then dissected out the cords, and placed upon them rude clamps, he had made the day before. This part of the operation seems to have been performed with less resolution. However, he drew them as tightly together as he could, and, with one stroke of his jack-knife, cut off the offending members. In this condition, he set out for the County Hospital. On getting off the street-car at Eighteenth street, he fainted, and fell to the ground. The police had him taken up, and brought the rest of the way in an express wagon. He was immediately admitted, as an

urgency case, and put to bed. The wounds healed by granulation. He expressed no regret, except at the danger of his exposure. He was discharged, cured, Feb. 17th, 1868.

234 *Thirty-first street*, *May* 23, 1868.

A CASE OF FRACTURE OF THE VERTEBRA.

BY R. G. BOGUE, M.D., SURGEON TO COOK CO. HOSPITAL, CHICAGO.

JOHN WIDDIS, aged 24, Irish laborer, was admitted into Cook County Hospital, April 14th, 1868. A few hours previous to admission he fell from a hand car while in motion, the car passing over him, quite doubling him up forward. Immediately after the injury, he noticed he had no control over the lower extremities, nor feeling in them.

On admission to hospital there was perfect consciousness, no pain, except at a point in the back, when the body was moved in any direction. At this point, which was in the region of the junction of the dorsal and lumbar vertebræ, there was moderate tumefaction, with tenderness on pressure, very little or no discoloration; a noticeable prominence of a spinous process, and near this, on either side, a hard body could be felt, supposed to be the transverse processes. There was no mobility of any of these prominent points. No other places of injury could be found. There was complete loss of sensation and motion of the lower extremities, the anæsthesia extending to a point about the hips, nearly as high as the cresta ilii. No urine passed since injury.

The diagnosis was: a fracture of the vertebra; and the patient put to bed, lying upon his back, there being apparently nothing to do for him except to minister to his wants in a general way as they should demand.

April 17th.—Patient about the same as when admitted; the bladder has been relieved four or five times a day with catheter; bowels not moved; a large injection has been used,

but no response: three drops of *Croton oil* given, producing two copious evacuations; appetite fair; sleeps well; lies upon the back, and on either side, alternately; some pain at the point of injury whenever he is turned in bed. The prominent points, where pressure comes, begun soon to look a little red, as though they might slough.

24th.—Has remained much the same, except failed in strength and flesh; bed-sores have begun to form over the sacrum and trochanters; no pain; bowels moved by cathartics or enemata; urine drawn by catheter. There is now marked deformity at the point of injury, the spinous and transverse processes being plainly made out.

May 9th.—Has gradually failed, as above; bed sores rapidly becoming larger, and an extensive burrowing abscess has formed in one thigh and leg, discharging a large quantity of thin, offensive pus; sloughs have formed about the knees and ankles. The bed sores were dressed with *Permanganate of Potash* until the sloughs separated, then with *Carbolic acid*. Thin, fœcal matter leaks away from the bowels almost constantly; urine dribbles away; bladder not distended.

He has had one terrible paroxysm of pain, referred to the testicles, lasting an hour or so, relieved by large and repeated doses of *Morphine*, and warm fomentation to the parts. He was early put upon a water bed, but the bed sores continued to increase.

May 14th.—He is a good deal more prostrated and emaciated; a irritative or hectic fever has begun; pulse small, frequent and feeble, but little appetite, diarrhœa, sweats, sordes about the teeth, and low, muttering delirium. This condition continued until the morning of May 31st, when he died exhausted. He has had another severe paroxysm of pain in the testicles.

His mind remained perfectly clear until about one week before death, complained of no pain except the paroxysms above mentioned. His nourishment was liberal, and ale allowed. The temperature was noted repeatedly, being about two degrees higher below the injury than above it.

Post-mortem examination made about eight hours after death. The body very much emaciated, large and numerous bed sores upon the hips, and lower extremities; a marked deformity at the point of injury in the back. A section of the vertebral column was removed, revealing a fracture from below upward and backward of the body of the twelfth dorsal vertebra, and through the upper and outer part of the base of the transverse processes, and the ligamentous between the eleventh and twelfth dorsal spinous processes torn, the upper fragment, with the vertebræ above, shoved forward and downward, producing complete compression of the cord against the upper and posterior part of the lower fragment; the last ribs were partially torn from the vertebræ at their articulation, and twisted downward. The cord, about the point of compression was softened, the meninges adherent to the wall of the canal; in and about the injured parts there was a good deal of irrepairative material, a part of which had become bony; most of the inter-vertebral cartilage seems to have been destroyed by pressure of the fragments, or by absorption: a fragment of bone was separated and thrust upward between the vertebræ and the meninges.

RUSH MEDICAL COLLEGE. — SPRING COURSE OF LECTURES.

Prof. Allen: — Allow us, in behalf of the class in attendance at the Spring Course of Lectures at Rush Medical College, to express, through the columns of the Journal: first, our high estimate of the opportunities for study so generously afforded medical students, by the faculty of the above-named institution; second, our thorough appreciation of the course of Lectures delivered by Dr. C. T. Parkes, on Comparative and Descriptive Anatomy; Prof. Blaney and Dr. I. N. Danforth, on Toxicology and Medical Jurisprudence; Prof. Freer, on Physiology and Microscopic Anatomy; Dr. Fenn, on Ob-

stetrics and Diseases of Women and Children; Dr. J. E. Owen, on Surgery; and Dr. Wm. C. Lyman, on Surgery and Diseases of the Chest. We have also witnessed, with much pleasure and profit, Prof. Gunn's numerous and very successful operations at the weekly surgical Clinic; Prof. Powell's vivisections, illustrating the course on Toxicology; and Dr. W. R. Marsh's careful examination of cases presented at the medical Clinic. We are also under obligations for opportunities for extended observation at the County and City Hospital, directed, in the surgical department by Dr. R. G. Bogue, and in the medical by Dr. Thomas Bevan; and for similar favors at the Eye and Ear Infirmary, under the direction of Prof. E. L. Holmes.

These gentlemen have labored with unmistakable interest in behalf of the class, leaving no available means unused to make the Spring Course of Lectures, just closed, pleasant and profitable; and we hereby tender them, each and all, our thanks, with assurances of high personal esteem.

During the Spring Term, Prof. Blaney has conducted, most successfully, a course of instruction in Practical Chemistry, affording a rare opportunity for the acquisition of most useful knowledge — the possession of which demonstrates to every student the beauties of chemical science, together with its positive character, which can only be fully comprehended after practical manipulations in the laboratory. A large proportion of the class have attended this course, and desire us to say that they are a unit in their hearty appreciation of the benefits thus derived, and also in their appreciation of Prof. Blaney as a teacher of chemistry.

All things considered, we deem this Spring Course of great value to us as medical students, furnishing opportunities for observation and instruction not attainable in the more formal regular course; and we shall ever be thankful for its thoroughly taught lessons and pleasant associations.

F. L. WADSWORTH,
M. DONNELLY,
R. BROUGHTON,
} *Committee.*

CHICAGO, ILL., *May 30th*, 1868.

CORRESPONDENCE.

"There is nothing new under the sun." — SOLOMON.
"We travel in circles." — GEN. SHERMAN.

MORE particularly were these axioms of wise and great men brought to my mind, by *two very recent discoveries*, and their truth demonstrated.

Very recently, in the western part of New York, is the claim for reduction of dislocated femur, by tact, without pullies or traction — or, in other words, make the muscles restore the integrity of the joint, without force or suffering — made by a surgeon; and, *mirabile dictu*, one and another claimed the discovery, each giving dates and facts to show precedence and originality. This is *singular*, and can only be accounted for by the axioms above.

In 1832, I graduated at the University of Maryland, in Baltimore city, and wrote my thesis "Upon the American Method of Reducing Dislocated Femurs." Prof. N. R. Smith (and may his shadow never grow less!) lectured, as he does now, on surgery, and gave us the history of cases reduced by his father, Prof. Nathan Smith, of Yale; exhibted drawings on the subject, and demonstrated the success of the plan. In compliment to the father, from love of the son, I wrote a thesis; had all of Cooper's plates of pullies, and other tortures, attached, and demonstrated, by plates and drawings, the feasibility and success of the operation; and gave the credit of discovery to the elder Smith. I shall never forget standing in the presence of the graduating class and two thousand persons, to defend this thesis by seeming attacks of the son, and, on a black-board, in the heat of the controversy, demonstrated, as I thought, as fully as any one of the problems of Euclid, the feasibility of the plan, and the truth of its being an American discovery, and Nathan Smith the author. Yet, within

five years, there has been quite a controversy between two or three comparatively young men, each claiming and proving, by time (that can not lie), to be the discoverers. "There is nothing new," etc.

What brought this subject most to my mind was, in reading a "volume of forgotten lore," the article on "Fever, Malarial, Cryptogamous, Origin of; by Dr. J. K. Mitchell, of Philadelphia; Published in 1849." Whatever may be said of the truth or fallacy of the opinions given in the article, one thing is true: in certain lectures delivered before then, the opinions were asserted, and founded on certain facts and hypotheses; and had not Dr. Cowdell's Essay claimed this as a discovery, Dr. Mitchell never would have more than simply asserted, in his lectures, these facts as original. He published, and fully (as he thought) vindicated, not only the originality of the discovery, but its truth.

Dr. Cowdell is not the only claimant. Either Prof. Saulsberry, of Cleveland, or his friends here for him, claim that he is the author of this most true and most important discovery, the cryptogamous origin of fever; and many of the experiments were made here, and were observed and attested by several of our most talented physicians, very recently.

As we have remarked, the facts were set forth in lectures; and, in 1849, Dr. Mitchell issued a book, contesting the claim of Dr. Cowdell. Of course, any thing since will give way to the facts then published; and, in order to give your readers the facts, with your permission, I will copy Dr. Mitchell's remarks:

"My preference is founded on the vast number, extraordinary variety, minuteness, diffusion, and climatic peculiarity, of the fungi. The pores of these plants are not only numerous, minute, and indefinitely diffused, but they are so like to animal cells, as to have the power of penetrating into and germinating upon the most interior tissues of the human body. Introduced into the body through the stomach, or by the skin or lungs, cryptogamous poisons were shown to produce diseases of a febrile character, intermittent, remittent and contin-

ued, which were most sucessfully treated by wine and bark. As microscopic investigations become more minute, we find protophytes in disease, where, until our own time, their existence was not even suspected; as in the discharges of some kinds of dysentery, and in the *sarcini* of pyrosis. We are, therefore, entitled to believe that discovery will be, on this subject, progressive. The detection of the origin of the muscardine of the silk-worm, and a great many analogous diseases of insects, fishes and reptiles — and the demonstration of the cryptogamism of these maladies, their contagious character in one species of animals, their transfer to many other species, nay, even to vegetables themselves — all concur to render less improbable the agency of fungi in the causation of diseases of a febrile character. A curious citation was subsequently made of the fungiferous condition during epidemics and epizotics. These moulds, red, white, yellow, grey, or even black, stained garments, utensils, and pavements, made the fogs fœtid, and caused disagreeable odors and spots, even in the recesses of closets, and the interior of trunks and desks. These moulds existed even when the hygromatic state did not give to the air any unusual moisture for their sustenation and propagation. Their genus seemed to have, as many epidemics have, an inherent power of extension. The singular prevalence of malarious diseases in the autumn, is best explained by supposing them to be produced by the fungi, which grow most commonly at that season. The season of greatest protophytic activity is, in every country, the period of greatest malarious disturbance. The sickly season is in the rains of Africa, in the very dry season in Majorca and Sardinia, in the rainy season in the insular West Indies, and in the dry season of Demarara and Surinam. Even where the vegetation is peculiarly controlled, as in Egypt by the Nile, and the crytogami are thus thrown into the season of winter and spring, that season becomes, contrary to rule, the pestilential part of the year. Marshes are a safe residence by day, while they are often highly dangerous by night. In the most deadly localities of our Southern country and of Africa, the sportsman may tread

the mass of a swamp by day, although at every step he extricates vast quantities of the gases, which lie entangled in mud and vegetable mould. This point, so readily explained by reference to the acknowledged nocturnal growth and power of the fungi, is a complete stumbling-block to the miasmatists. The cryptogamous theory well explains the obstruction to the progress of malaria offered by a road, a wall, a screen of trees, a veil, or a gauze curtain. It also accounts for the localization of an ague, a yellow fever, or cholera; and the want of power in steady winds to convey malarious diseases into the heart of a city, from the adjacent country. It explains, also, well, the security afforded by artificially drying the air of malarious places, the exemption of cooks and smiths from the sweating sickness, the cause of the danger from mouldy sheets, and of the sternation from old books and papers. On no other theory can we so well account, if account at all, for the phenomena of milybrand and milk-sickness, the introduction of yellow fever into northern ports, and the wonderful irregularities of the progress of cholera. The cryptogamous theory will well explain the domestications of different diseases, in different regions which have a similar climate—the plague of Egypt, the yellow fever of the Antilles, and the cholera of India. It accounts, too, for their occasional expansion into unaccustomed places, and their retreat back to their original haunts. Our hypothesis will also enable us to tell why malarious sickness is disproportionate to the character of the seasons; why it infests some tropical countries, and spares others; why the dry Maremma abounds with fevers, while the wet shores of Brazil and Australia actually luxuriate in healthfulness. The prolonged incubative period, the frequent relapses of intermittents, and the latency of the malarious poisons for months, can only be well explained by adopting the theory of a fungous causation. Finally, it explains the cause of the nonconcurrence of very potent maladies, better than the chemical theory of Liebig; and shows why the earliest causes of an epidemic are commonly the most fatal." (Pp. 33–7.)

I have copied thus far, to settle priority of the claim to this

theory, whether true or false; and to prove "We travel in circles."

When Vasco de Gama sailed round the Cape of Good Hope, in 1497, and when Venice lost her supremacy, and commercial prosperity dawned on Europe and England, he thought he was the first to circumnavigate Africa; but he was mistaken. He but followed Pharoah-necho, the Egyptian king, who traversed the same, two thousand years before. And now, when the world is startled at the greatness and usefulness of the canal made by the present Napoleon, connecting the Red with the Mediterranean Sea, he is only doing what was *twice* before done — and once in a greater canal than his, connecting the Nile with the Red Sea. I could multiply cases, in the discovery of brass and glass; but I only wish to prove that "There is nothing new under the sun," and that "We travel in circles;" and to demonstrate that many great discoveries are but as "Charlie's," known to all men, but really believed discoveries by their authors.

Equally as bad, as claiming other discoveries — and worse, if possible — was our Government adopting some Frenchman's great antidote for snake-bite, putting it among articles furnished to army surgeons; — a discovery of Prof. Brainard. He told me, after years of experiment with snakes in his office, and his friends abusing him roundly for their presence and fœtor, he discovered a remedy as antidotal to the poison of snakes; and, on publishing it, the Government had put up the identical prescription, under the name of *Bibron's Antidote*, and sends it even now, after he made the full explanation of the facts to the War Department. This is almost as unpleasant "as a bad picture, and worse bust." E. O. T.

Cubebic Acid.

The active principle of *Cubebs* has been found to reside in *Cubebic acid*, a chrystallizable constituent, and not in the volatile oil or resins. From eight to thirty grains of this, in pill, in the twenty-four hours, will, it is said, cure in six days. Mild astringent injections will soon remove any remaining symptoms, in the less tractable cases.

EDITORIAL.

Items, News, and Gossip.

THE Supreme Court of Michigan "reserves its decision" on the question whether the "vinegar factory" established at Grand Rapids by the Board of Regents of the University at Ann Arbor is or is not a *Department*, in the eye of the law, of the latter concern. It is *still* in abeyance. Several years ago it will be recollected the same court was "equally divided in its combined mind on the Prohibitory Liquor Law." The old question now comes up in a new shape.——The resignations of Profs. Armor and Greene have been accepted. Prof. Sager still doubts, and Prof. Ford is at present in very deep water. ——The best essay on Medical Education we have recently read we reproduce bodily from the *Medical Gazette*:——"Many of our exchanges discuss the question of medical education from various points of view. It seems to us that there are two indications to be fulfilled; first, to select students with enough brain-room to contain the necessary amount of knowledge, and second, to fill that brain-room with proper material. The difficulty lies rather with the learners than with the teachers in every profession. It is impossible to get a pint of cream into a gill measure."——To which, however, we add: It is as difficult to get cream from some *cattle* as "blood from a turnip."—— Liebig's artificial milk is an imitation of the natural milk, as near as chemistry can make it. Boil ½ oz. of wheat flour to a paste in 5 oz. of skimmed milk. Then add ½ oz. bruised malt, 1 oz. water, and a solution of 3 grammes (about 20 grains) of bicarb. pot. in 11 parts water. Keep this in a bottle surrounded with warm water till it gets creamy. Then put it on a fire, and then strain it through a fine sieve.——Prof. Robley Dunglison has resigned the position he has long and illustriously filled in Jefferson Medical College.——Clarke's process of preserving

bodies, mainly by carbolic acid, proves very successful. At Bellevue an autopsy was made, and the tissues found perfectly fresh, although 107 days after death. We shall publish the process next number.

We trust some of our readers will give us the results of their observations on the pernicious effects of the too long continued and excessive use of *Bromide of Potassium*. We have seen those of very disastrous character, but our profound regard for the code of ethics temporarily obliges us to abstain from details. ——A little *Ether* in the bottle containing Ergot or similar substances, liable to destruction by insects, will be found a good preservative.——The *Pacific Medical and Surgical Journal* now reaches our sanctum regularly, and we take pleasure in saying, is one of our most valued and valuable exchanges. It is published at San Francisco by Bancroft & Co., and edited by the Drs. Gibbons. $5.00 a year, postage prepaid.

The Illinois State Dental Society held its fifth annual meeting at Springfield, May 12, 1868. At the last meeting of this Society, Drs. French and Smith were appointed to present subjects for discussion. The topics embraced Facial Neuralgia, Operative Dentistry, Treatment of Decayed Six Year Molars, Plugging Pulp Cavities and Canals, Receding of Gums, etc., Local and General Anæsthesia, Vulcanite, Gold Plates, and miscellaneous business. We have been informed that the diligent members of this Society had a well attended and instructive session. The subjects were reviewed fully, and much light shed upon the details of the science.

The New York *Medical Gazette* passes under the control of A. L. Carroll, M.D. His salutatory is brief and to the point:

The most notable event of the week, as regards this periodical, has been the shifting of its editorial responsibilities upon new shoulders; a transition effected with such volcanic rapidity that its strata may be found, perhaps, somewhat distorted. We therefore crave our readers' indulgence for any plutonic ruggedness of aspect in our literary landscape this week, and hope, hereafter, to smoothe its surface with fertile deposit.

We have authority for stating that Dr. Duffield's Vacuo-Maceration Process is not patented. A full description is given on page 275 of April 15th No. of Medical Journal.

North-western Medical Agency.

The Journal takes pleasure in directing attention to the advertisement of Messrs. Walker & Son, on our advertising

pages. The profession will find them thoroughly competent and reliable. Orders of all kinds may be entrusted to them with entire confidence that they will be attended with promptness, sound judgment, and at reasonable rates.

H. V. PASSAGE, M.D., of Peru, Ind., in a private note, says: "Mr. Stohlman, of the firm of Tieman & Co., N.Y., made the first hypodermic syringe at the request, and for the use, of the late Prof. Brainard, *over twenty years ago.* The French condemned the instrument when it was exhibited to them and its uses explained by Dr. B., but long afterwards claimed it as a specimen of French invention."

THE prospects of *Rush Medical College* were never more flattering than at the present. The applications for circulars and letters are multitudinous from every part of the country. The present Editor thinks this is because the profession recognize the fact that its Faculty attend to their business as such, and do not meddle with *isms* and Utopian schemes hatched in empty heads. The best kind of *reform* begins at home.

CORRESPONDENTS, we trust, we trust, will still bear with us. Their favors are duly appreciated, and will appear as space permits. LOOT will be afforded in abundance shortly.

Cause of Scurvy.

Recent experiments upon frogs, dogs, and other animals, by M. Prussak, of St. Petersburg, tend to sustain the older view that scurvy is produced by an excess of common salt in the blood, occasioned by an exclusive salt meat diet. Injections of salt water beneath the skin of frogs, caused the blood corpuscles to distend the vessels, and gave rise to patches of dark colored extravasations, very like scorbutic blotches. It is suggested, in explanation, that excessive osmosis occurs in consequence of the increased density of the blood.

New Remedy in Intermittent Fever.

A correspondent of the *Southern Journal of Medical Science*, says that he has been successful in curing several cases of obstinate intermittent fever, where *Quinine* had failed, by using the *Liquor Ferri Persulphatis.* He usually premised a full dose of *Pil. cath. co.*, and then gave the *Liq. fer. p.* in doses of from eight to fifteen drops every four or six hours.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—JULY 15, 1868.—*No.* 14.

SIMULATED EPILEPSY.

From Les Annales de l'Hygiene et de Médecine Légale.

TRANSLATED EXPRESSLY FOR THE CHICAGO MEDICAL JOURNAL BY WALTER HAY, M.D., POST OFFICE BLOCK, CHICAGO.

CERTAIN simulators of epileptic attacks acquire so great facility of imitation, that expert alienists themselves can be, and have been, frequently deceived. Such examples are not rare.

Inspired by the labors of M. Brown-Séquard upon the disturbance of the great sympathetic in epileptic attacks, M. Auguste Voisin has thought that this disturbance would be extended throughout the vaso-motor system, and consequently to the arteries of the limbs, and has instituted upon several patients, upon healthy persons who had taken violent exercise, and upon simulators of epilepsy, sphygmographic experiments, which have conducted him to the following conclusions:

1. Epileptic seizures and simple (epileptic) vertigo induce disturbances of the arterial circulation, which may be recognized by means of the sphygmograph of Marcy, and which are characterized by very decided curves, then by ascending lines of great height, and a very marked dicrotism, which persists from half an hour to several hours.

2. These sphygmographic forms have been obtained from my

patients, and from myself after gesticulation, violent efforts, or rapid running.

3. The study of the pulse of an epileptic simulator has demonstrated to me the absolute absence of resemblance between the sphygmographic diagrams formed under these conditions, and those taken from epileptics.

4. Being given an epileptic simulator, it will suffice to submit him to regular observation, and to take several tracings (sphygmographic) during an hour after the attacks, in order to decide the question of simulation.

The experiments of M. Auguste Voisin are very interesting, and the means of diagnosis which they appear to indicate may be very valuable. It is desirable that they should be repeated and confirmed by other observers, and that the new field of observation which they open should not remain uncultivated.

ON THE INFLUENCE OF THE SECTION OF NERVES UPON THE PRODUCTION OF INTESTINAL LIQUIDS.

Academy of Sciences, Paris, Session of March 16, M. DELAUNAY, *President.*

BY M. A. MOREAU. PRESENTED BY M. CL. BERNARD.

THE experiment which I am about to describe demonstrates that the section of the nerves supplying the intestine, determines the production of liquids in the intestinal cavity.

Upon a dog of large size, and well fed, but fasting since the previous evening, at least, and whose intestine was consequently empty, I performed, under the influence of chloroform, a section of the abdominal wall, along the linea alba, and laid bare, separating from it the epiploon, a large loop of intestine. I selected upon this loop, with reference to the distribution of the vessels, a length of ten or twenty centimeters (from 4 to 8 inches). I applied two ligatures in such a manner as to have thus enclosed a small loop, which could receive fluids coming

neither from above nor from below. I formed, moreover, by the aid of two new ligatures, two other loops, the one above, the other below the first. These three cavities were vacant. I then isolated, with the greatest care, the nerves which distribute themselves upon the middle segment; these nerves proceed in close apposition to the blood vessels, or are placed at some distance from them.

I cut them with caution; then, the intestine and the epiploon being replaced, I sewed up the lips of the wound made in the abdominal wall.

The dog awakening soon afterwards, appeared to be unconscious of the operation which he had sustained. At the end of several hours he was killed, and the abdomen opened. The liquid contained in the enervated segment was collected by puncturing the intestine with the aid of a trocar. The two adjoining segments, unmutilated, were flaccid and empty, contrasting in appearance with the mutilated segment. Their mucous membrane was tight, and even dry to the finger, whilst that of the enervated segment was smooth, humid, and softened by the presence of the newly formed liquid which bathed it.

This liquid contained mucus, white globules, and mucous corpuscles. It was entirely free from red globules, except in the case where the thread which closed the intestines should have cut the sanguineous vessels. I easily avoided this accident, by employing ligatures which do not cut, such, for example, as tubes of caoutchouc of small diameter.

By rest, this liquid deposited mucus, some traces of alimentary matters, and frequent debris of tænia, also mucous corpuscles and leucocytes, the quantity of which offers variations very interesting to study. This liquid, when filtered, is clear, with a slight yellowish tint; its density equals 1.008. It is strongly alkaline, and contains a quantity of carbonate or of bicarbonate, corresponding to 0.2 gr. of anhydrous *Soda* per 100 grammes.

The organic matters furnished a weight of 35 to 45 centigrammes, and the mineral matters a weight of 9 to 9.5 decigrammes per 100 grammes of the liquid. The fixed residuum

consisted of alkaline carbonates, chlorides, and a little sulphate and phosphate of lime.

A quantitative analysis of three different portions of the liquid showed that the sodium varied from 34 to 36 per cent., the potassium from 2 to 6, the chlorine from 32 to 45, and the sulphuric acid from 1 to 4. The phosphate of lime weighed during a single analysis formed about two per cent. of the residuum.

Upon the addition to the filtered liquid of *Acetic acid*, in sufficient quantity to neutralize the alkali, there was obtained by ebullition a coagulum whose weight varied from 8 to 10 centigrammes, and which represented also the third or the fourth of the organic matters. Urea was found in the non-coagulated matters; measured by an analysis, it furnished a weight of 16 milligrammes per 100 grammes of the liquid.

The quantity of liquid obtained in a segment of intestine rose to 100 grammes in a dog killed three hours after the operation; and to 225 grammes in another, which I exhibited to the Biological Society, and which had been killed eighteen hours after the operation.

The comparison of this liquid with the intestinal juice, the study of the conditions which cause the variations in the quantities obtained, and other points which presented themselves to my observation deserve, I think, to be developed in another communication.

In brief, the section of the nerves supplying an intestinal loop, determines the production of liquids in that loop. The portion of intestine distant one centimetre higher or lower, remains in complete repose as regards the production of intestinal liquids.

I have made, and am now prosecuting these investigations, in the laboratory of M. Cl. Bernard at the College of France, since the month of May last.

RETROVERSION OF THE PREGNANT UTERUS.

Read before the Chicago Medical Society, by R. G. Bogue, M.D., *Surgeon to Cook County Hospital.*

October 31st, 1866, was called to see Mrs. H., who asks relief for what she calls "falling of the womb," which has annoyed her very much of late.

History—She is of English birth, forty years of age, commenced menstruating at ten years, which has continued regular ever since, except when pregnant and nursing. Married at about twenty-three. Has had three or four children, the youngest twelve years ago. Soon after getting up from her last confinement, she began to have some distress in the pelvic region and back, which has continued more or less since then, at no time very severe. Her menstrual periods have passed off without much inconvenience until about three or four months ago, when they ceased. For a long time she has felt or noticed some fullness of the vulva after being upon her feet for some time, but don't recollect when she began to notice it; but during the last two and a half or three months it has been quite noticeable, and very markedly so for the last few weeks, with an increased amount of distress, and, aside from the pain in the back and hips, has had some pain along the thighs, but not severe; her chief annoyance now is from a "swelling," which protrudes from between the labia when upon her feet, and the increased suffering when in same position.

Condition—On examination, there was found presenting itself at the anterior part of the vulva a tumor, about the size of a hen's egg; soft, compressible, and not tender; which comes well out from between the labia while standing, but recedes when lying down. Pressing upon the posterior part of this tumor, and just within the vulva, was a hard body, which, she says, comes down even with the labia after stand-

ing or walking for some time. Pressing the finger upward along this for a little distance, there was a pretty short bend or flexion backward, terminating in a large globular tumor, filling up a good share of the hollow of the sacrum.

Diagnosis—Prolapse of the anterior wall of the vagina with posterior wall of the bladder, prolapse with flexion and curving forward toward the pubis of the cervix uteri, and retroversion of the uterus into the hollow of the sacrum. The cervix was long, but little if any enlarged, and not tender; the mouth was patulous, so that the end of the little finger could be introduced into it; there seemed to be no disease of the cervix nor of its canal.

The soft tumor was readily ascertained to be made up of the walls of the vagina and bladder, by introducing a sound into the bladder. There was no tenderness nor soreness of the parts; neither of the soft tumor, cervix, or body of the uterus.

The difficulty had been increasing quite rapidly during the last two months, but there had been no abrupt symptom which could mark the time of the displacement of the uterus. The cause of the enlargement of the womb certainly was not evident,—there being apparently no inflammatory condition of the organ, with cessation of the menses for the last three months, and an irritable condition of the mammæ for a time, it was certainly suspicious that she was pregnant, although there had been no morning nausea. On the other hand, could it not come from retained menses, they being confined within the cavity by the flexion of the neck?

Queries in the case respecting treatment or interference—One indication was, the restoration of the womb from its abnormal position. Effort was made to replace the organ by pressure upward with the fingers in the vagina, but without success.

The use of the sound would be proper if there were no pregnancy. If she were pregnant, she could not go on to full development with the organ in its present position; it might possibly, in course of development, rise up out of the pelvis,

but this was only problematical; as it was, it could develop to a size quite filling the pelvis, then there would be, without doubt, abortion; and this with a good deal of risk to the patient, and probably after a great deal of suffering from pressure of the pelvic organs. My conviction was, that if she were pregnant, an abortion at that time, with the womb replaced, would be preferable to leaving the case to see what might become of it, or an abortion at a later time, when the womb could not be replaced. I therefore determined to try to pass the sound into the womb if it met with no obstruction at the internal os, but if it should, to solicit counsel in the case, not feeling willing to take the responsibility of producing an abortion.

After explaining the condition of things as I had found them to the patient, and giving her the general facts respecting her case, its probabilities, etc., I told her I would try to introduce the sound for the replacement of the womb; but if it met with any obstruction in its passage, I should stop, the more firmly believing her pregnant, being willing to do no more without counsel.

With the patient lying on her left side, knees drawn well up, and with the sound bent quite sharply about an inch from the end, I began its introduction. It passed along, without the least resistance, through the cervix into the cavity of the uterus, which was much enlarged, as shown from the depth the sound entered.

There was no pain from its introduction, nor from the efforts made for replacement. By gentle but persistent effort of lifting the organ upward, it was felt to move, when the direction of the sound could be changed from its face looking backward—as was necessary for introduction—to the face looking forward; and the back of the instrument, instead of pressing against the anterior commissure of the vulva, now pressed against the posterior one. The fundus uteri could now be felt through the abdominal walls, and upon vaginal examination the os could be felt in its normal position, looking downward and backward, instead of being found just beneath

the symphisis pubis; and no globular tumor could be felt filling up the hollow of the sacrum. From all this there was left no doubt as to the diagnosis, nor of the replacement of the organ. Upon withdrawing the sound, it was found that it had entered the uterus to the depth of full five inches, and on it was fresh blood, leaving little or no doubt as to the cause of the enlargement of the organ, and from its malposition giving rise to the marked increase in the symptoms in the case.

She was directed to keep quiet, remaining recumbent the remainder of the day, and to be upon her feet as little as convenient, for a few days at least. She had some pain that evening, and the discharge of a small blood clot; but after that night she was comfortable; had less pain or distress in the pelvis and back, with less protrusion of the soft tumor.

She continued thus until November 23rd, thinking herself very comfortably over her trouble, believing herself not pregnant, and myself thinking it probable that the enlargement of the uterus to have been from some other cause; supposing it quite certain that an ovum would have been expelled soon, after having been jostled or injured by the introduction of the sound, with the manipulation necessary for the restoration of the uterus. But during the night of the 22nd November she began to have some pain in the back and in the pelvis, with a slight discharge of blood. I saw her in the morning; found her complaining as above. The pains were evidently uterine; the uterus could be felt above the brim of the pelvis; a few small blood clots had been expelled. Now it appeared that she was pregnant and about to abort.

I directed her to keep her bed for the day, and send me word if the pains should increase, or if there was much increase of the discharge. About eleven o'clock that evening I was called to her; there had been no marked increase in any of the symptoms until within an hour or two. I found her having quite severe labor pains, and upon vaginal examination, found the os dilated and the little fœtus presenting, which, with the placenta and membranes, was expelled in the course of a couple of hours.

Upon examination of the fœtus, there was found a slight bruise on one of the hips, which was the only mark to be found. On the placenta there was along one border, just within its attachment, a dark colored line of some two inches in length, narrow, a little hard, evidently colored by blood. This, I have no doubt, was caused by the uterine sound, the point where it passed separating the placenta from the uterine surface. The lady made a speedy and good recovery, and has been as well as before this pregnancy. She has yet the annoyance of the soft tumor or prolapsed vagina, but in a less degree than during it; but has not noticed the cervix at the vulva.

One question which suggests itself in the case, is the time when this retroversion occurred. This I could not learn. Another is, could the organ have been replaced by other means than that resorted to? I made effort only by use of the fingers in the vagina, which is, I believe, seldom of much value. I have seen notice since in some journal, of two cases of retroverted pregnant uteri being replaced by inflating a rubber bag in the vagina. This certainly would be a very harmless proceedure, and if effectual, the most simple. The colpeurynter could be used for this purpose; I should now make use of it in a similar case. Another, was the introduction of the sound justifiable under the circumstances, before other means had been tried? I did in the case what I thought at the time right and proper, yet felt not a little chagrined to find that I had been the means directly of procuring an abortion.

THE PROPHYLAXIS OF VENEREAL DISEASES.

BY F. J. BUMSTEAD, M.D., PROFESSOR OF VENEREAL DISEASES AT THE COLLEGE OF PHYSICIANS AND SURGEONS, N.Y.

"*Cito, tuto, . . . et jucunde.*"

But little is said of the prophylaxis of venereal diseases in English or American treatises on venereal. Our Anglo-

Saxon morality is so high-toned that we shrink from placing any obstacle in the way of vice meeting with its just reward, and so inconsistent that we are glad to shorten the misery once incurred and—pocket the fee! But when we reflect that the passions always will control, as they always have controlled, the moral sense of the greater part of man and womankind, and that the effects of vice are by no means confined to the guilty, it is evident that this subject is not unworthy of consideration.

The confession of one's faults is regarded as a virtue, and yet it has always appeared to me that if anything could aggravate the injury done by an unfaithful husband to his wife, it was the revelation of his guilt, to be brooded over by her in many a lonely hour, perhaps forgiven but never forgotten; and the demands of the *ménage* may be imperative, if the secret is not to be divulged.

The danger in coitus may be said to be two-fold: 1st, That of contracting gonorrhœa; 2nd, That of contracting either a chancroid or chancre. This division should be borne in mind in the consideration of prophylaxis, because the first mentioned disease has its seat either within the urethra or vagina, while the external parts alone are commonly exposed to the latter; and although certain precautions are equally applicable for both, the same is not true of all. Moreover, precautionary measures must vary somewhat with the opposite sexes, and also according as it is the object either to avoid contracting or avoid giving disease.

Gonorrhœa originates in two ways: 1st, By direct contagion; 2nd, By any source of irritation acting upon the urethra, such as leucorrhœal discharge, especially if aggravated by repeated or prolonged intercourse, unusual sexual excitement, violent exercise, etc. The latter mode of origin is even more frequent than the former.

Direct contagion from the gonorrhœal virus in both sexes is best avoided by the use of an article—the condom—which, tradition says, was invented by an Englishman visiting Paris, and was called after his name, but which gained for him such

unenviable notoriety that he was obliged to change his appellation. Madame de Stael is said to have pronounced it "a cuirasse against pleasure, a cobweb against danger;" but the poor lady must have been unfortunate in her selection of the article, which is still justly regarded as affording the best protection within the power of art. Condoms made of the cæcum of the sheep are most reliable; those of vulcanized rubber, especially when old, are brittle and liable to break.

In the absence of any such protective covering, the greatest safety for the male who is is exposed, consists in urinating directly after the act of coitus, and, once or twice, as the urine is flowing, in compressing the lips of the meatus, so as to distend the fossa navicularis with the fluid, which subsequently escapes with some force, and washes out any purulent matter which may have gained entrance within the meatus. As the Latin adage has it:

"Post coitum si mingas,
Apte servabis urethras."

For the female, emptying the bladder is equally desirable, and the vagina should be thoroughly and copiously washed out, by means of a Davidson's syringe and a pint or two of water.

Authorities differ as to the advisability of urethral injections as a prophylactic after suspicious intercourse. Diday recommends one of a weak solution of sulphate of zinc, and has invented for the purpose a minute syringe—a sort of gentleman's pocket companion, so small as to be carried in the vest pocket, or concealed in the palm of the hand, the shaft of the piston being furnished with a hinge, so that—the instrument having been filled before leaving home—it can be bent at a right angle, and the contents will not be forced out until the proper time for using it. Ricord, on the contrary, objects decidedly to the use of urethral injections, as likely to add to the irritation of the canal, and it is probable that a thorough cleaning with the urine, in the manner just indicated, is to be preferred.

In the case of a man or woman affected with a discharge,

and in fear of communicating it to another, it is evident that these precautions—micturition and vaginal injections—should precede the act of coitus.

But the causes of gonorrhœa, aside from direct contagion, are also of great importance; and it can not too often be repeated, that a large proportion of claps are contracted under circumstances of especial excitement, and with more moderation might be avoided. Frequently, intercourse has already taken place with impunity between the same parties, but then comes a dinner, wine, a dance, a night of *orgie*, and —a clap! Ricord's prescription for catching a clap will also serve to indicate how to avoid it:

℞. "A woman of a lymphatic temperament, pale, a blonde rather than a brunette (the more white she has the better), invite her to dinner; order oysters for your first course, and asparagus for the second; drink often and freely—white wines, champagne, coffee, liqueurs, they are all excellent; after dinner dance a while, and make your companion dance with you; get well heated, both of you, and quench your thirst with beer; at night play your part valiantly, two or three times are not too much, and oftener would be better; in the morning, don't forget to take a warm bath, nor neglect to give yourself an injection.

"This programme having been conscientiously followed out, if you don't have the clap, it is because Providence has preserved you."

Again, women should be avoided a day or two before, and especially for a few days after, their menstrual periods, for it is particularly at these times that the muco-purulent secretion, from which the vagina of but few of the gentler sex at the present day can be said to be free, possesses irritant qualities sufficient to light up urethoitis in the male. It is a question whether the law of Moses, prohibiting intercourse within seven days after the menses, was not intended as a hygienic precaution.

We come now to the second class of diseases mentioned at the outset, viz.: the chancroid and true syphilis. As regards

their prophylaxis, the condom is less efficacious than against gonorrhœa, at least when it is the woman who is diseased and the man who is exposed. As is well known, the labia are a favorite seat of mucous patches, the secretion of which is but little, if at all, less contagious than that of a primary lesion or chancre; and these parts, *in coitu*, are brought in contact with the pubes and the root of the penis, which a condom does not protect. I have at present under my care a young medical man, who finished his education in Paris, and while there indulged in some of the gaieties of that gay city. Thinking to protect himself from harm, he was in the habit of using a *capote*, which, however, did not prevent his contracting a chancre at the peno-scrotal angle. Ricord, to whom he first applied for treatment, reminded him of the folly of exposing himself to a rain storm with an umbrella over his head, but with his feet bare!

Any preliminary attention to cleanliness for a person exposed to contract these diseases is a mistake, for the natural sebaceous secretion of the parts affords a degree of protection that can only be less perfectly supplied by the use of sweet oil, simple cerate, and other unctious substances.

For a person already diseased and liable to convey the disease to another, previous cleanliness may be of some value in removing any collection of matter, and cauterization of the sores may also lessen the danger; but such means are obviously unreliable. I have known medical students in our several hospitals to have intercourse with the inmates, relying on a previous cauterization of chancres or mucous patches with the nitrate of silver, and yet contract syphilis. Possibly, the application of the carbo-sulphuric paste, which appears for a time to dry up the secretion of venereal ulcers, and which forms a very adherent scab, might have been more efficacious, but it is an experiment not likely to be tried except by a fool or a drunken man.

Three centuries ago, Nicholas Massa enunciated the precept: "*Si vero quis cum infecta muliere coire voluerit, quod fatuum est, non moretur in coitu.*" The longer the exposure,

the greater the danger, not only because contact with the virus is prolonged, but also because the virulent secretion is constantly on the increase. Frequent repetition of the act is open to the same objection, and although the precept "*Non bis in idem*" may be too strict for the ardor of youth, "*Non quater in idem*" is both reasonable and prudent.

After exposure, the utmost attention is, for both sexes, most desirable. Although we have reason to believe that the absorption of the syphilitic virus, if it meets with any solution of continuity, is instantaneous, yet doubtless it often remains for some time upon the surface, until, after first acting as a common irritant, it gains entrance beneath the epidermis. In the latter case, there is still an opportunity to remove it by careful ablution, either with simple water, or preferably, with soap and water, water slightly acidulated with vinegar, or a weak solution of carbolic acid, taking care to pursue the enemy in the folds at the sides of the frænum and around the vulva, and in similar situations, where he is most prone to lurk.

There is a danger little dreamed of by persons indulging in illicit intercourse; I refer to that of contracting syphilis elsewhere than upon the genital organs, and especially upon the mouth. I have had several men under my care who have thus contracted chancres upon the lips, while their genital organs escaped contagion, and this, too, in the absence of any unnatural mode of indulgence. If this occurs with men, the danger must be still greater for women, since mucous patches are well known to be far more frequent in the male than in the female sex.

I do not propose at present to take up the prophylaxis of venereal diseases through the legal restriction of prostitution, but desire to make a single remark upon the subject. If the men who visit houses of ill-fame could be subjected to examination, far more would be done to suppress disease than by any visitation of the female inmates of such places, since with the former the evidences of health or disease are much more patent and more easily recognized than in women

This is already being done by the better class of prostitutes in Paris, who, to protect themselves from the confinement to which they are subjected in case they are discovered to be diseased, will not allow a man to cohabit with them unless they have first made an examination of his person, in which they become quite expert. Thus the police regulations adopted in that city are accomplishing their object in an unexpected way.

LEGITIMATE AND ILLEGITIMATE MEDICINE.

BY W. T. AKINS, M.D.

PROF. ALLEN:— I have steadily abstained from annoying you with any of my maundering effusions, fearing that some of your readers would deem such asthenic contributions out of place in your valuable columns, and, mayhap, detrimental to medical interests. But I have at last yielded to the solicitations of some friends, and concluded to expend a part of the excess of the *vis nervosa* in inditing you some news and observations, as per heading. I do not propose furnishing your readers with sphygmographic measurements of the professional pulse, or hæmadynamometric calculations as to the medical circulatory forces, nor will I present any standard of ethics born of my ontological views, to which I deem it necessary every man should conform, or suffer the alternative of proscription. But as my article is to suffer no constriction in consequence of old adhesions or recent morphological changes, I will say, *in limine*, "*qui se sent galeux se gale.*" With regret do I announce, as the result of my observations, that the genius, the spirit, and the form of medical ethics, are entirely ignored in the Garden City. The sharp conflict, heated rivalry, and ofttimes base competition that characterize medical as well as other pursuits, has something to do with this lamentable state of affairs. Another and perhaps stronger cause, is the presence here of so many ignorant pretenders —

Prof. Rea's class of "detested hurters," with whom high-minded, educated medical men will never fraternize. You may have magnanimity of heart, and catholicity of spirit, and yet you will find it hard beyond the possibility of consummation to counsel with or recognize these lilliputian negations. Treat them with conversational regard, and they will insult you by sycophancy and servility, mutilations of language, and ignorance of philosophy. They will use synonymously pathology and physiology, confound retention and suppression as words expressive of similar conditions, and cap the climax by holding proctelitis and phrenitis to be one and the same disease. Shades of Apollo! Royal son of Delos! Just think of one of these molecules of a professional micros reading the Sybilline leaves of destiny to some fated mortal, without as much as consulting the degrees of Parcæ. Here are Bassett and Bigelow, *et id omne genus*, each of them a veritable Autolycus, stealing the gifts of legitimate medicine, and prostituting all to the base and shameful purposes for which they live. It is sadly to be feared that the Danaides will accomplish their task in the regions of Tartarus, ere we succeed in cleaning this Augean stable of ours, unless a wiser legislation and a higher regard for ethics renders it impossible for these impostors to get license or business. Perhaps the most convincing testimony as to the profound ignorance of some who claim to be regulars, is to be found in their opinions and remarks. Dr. Clark was lucky enough to get hold of a prescription by one of these benighted fellows, and gave it *in toto*, to show us a specimen of our rivals. Less fortunate than the Dr., I can only give you the remarks and opinions as made and offered verbally. One of these fellows, reputed to be the surgeon of a semi-quack establishment, expressed it as his opinion that ossification of the "ductus arteriosus" contributed largely to the production of hypertrophy of the heart. That there was a great difference between scarlatina and scarlet fever. That the antero-posterior diameter of a normally developed fœtal head at birth is nine inches. During the prevalence of small pox last winter, one of these fellows, formerly a plasterer in

St. Paul, visited a woman, and notwithstanding the patient was suffering from great pain in the back, or spine-ache, distressing nausea and vomiting, severe cephalalgia, hot skin, and accelerated pulse, he pronounced it a bad cold; visited her next day, and although all the symptoms were more aggravated, confirmed his diagnosis, and left. I was called in a few hours, and found the patient laboring under a severe attack of variola confluens, eruption thickly studding corpus and temporal region. Two other notables of the same class visited — shades of tocology! — a woman in confinement, and after concluding to rupture the membranes, laid open the scalp from the coronal to the lambdoidal suture, down to the skull. It is burdensome to offer more, and all must be disgusted ere this. One, called a surgeon, without information enough to perform the duties of an oncotomist; the other practicing medicine without being able to diagnose a disease with every diacrittic symptom needful to a tyro; and, finally, these tocologists, unable to distinguish between the membranes and the fœtal scalp. Turning about a little, and I recognize still another, who, though proclaimed a Corypheus in the healing art, I can not but look upon as very much less than an "apostle," if I am to understand by the word apostle, one who teaches and practices the doctrines of the great I AM. It may not be needful, in order to the honorable and skillful practice of physic, that every practitioner should make stated pilgrimages to the Castalian fount, where poets drank and muses quaffed, damp his brow with dews of Helicon, or rest him awhile in some parterre on the sacred mount of Parnassus; but ere he proclaims himself the only medical reformer of his time and age, is it not well that he look a little after all the needed accomplishments calculated to aid him in his high and hard battlings for his favorite dream; that he manifest consummate mastery of facts, analysis, and logic, in his discourses on medical philosophy, and that he exemplify in his practice the unfailing worth of the truisms and axioms promulgated in his teachings. And, furthermore, would not a more rigid regard for ethics, and the feelings and ability of

others, contribute to his honor, and the number of his proselytes? By some he is acknowledged as the great medical Cyclops, and he may be; but his foibles are as apparent as was the heel of the armor-encased Achilles. You may wonder why one unknown to fame presumes thus to touch the little fishes that sport in the shoals, and at the same time lay hands on the great leviathan of the unfathomed deep. I can only say that as a member of our profession, and wishing to see its ranks depleted of impostors, and recruited by able, scholarly men, I felt it my right and my duty to speak independently and fearlessly. The rich mines of English, German, and French medical literature are open to all of us who have the mental hardihood to win our way to the feast; and for any man to arrogate to himself the possession of all knowledge found in the wide domain of medicine and surgery, is to discover to those about him his utter unfitness to teach or practice. In some future number I will present my views, if acceptable, as to the best and most expedient method of securing ourselves and the people against the ignorance of the puerile, and the impudence of impostors. I have written in no spirit of enmity or hate, but from candor, and from deep convictions. We must devise some method by which we may free our ranks of the many disgracefully ignorant who practice under the title of "regular," and the community of the host of quacksalvers, who prey like insatiate vultures upon the vitals of community — and certainly the people would soon be annihilated but for the fiat, *Crescite et mutiplicamini*, which enables them, Prometheus like, to reproduce themselves.

FOREIGN CORRESPONDENCE.

BY PROF. J. W. FREER.

DUBLIN, June 7th, 1868.

J. ADAMS ALLEN, M.D.— *Dear Doctor :*— I arrived in the city of Dublin on the 25th ult. We had an unusually short passage — only nine days from New York city to Queenstown — for which favor I am duly thankful, as with me the sea does not improve on acquaintance. In my journeyings I have the pleasure of being associated with Dr. Charles G. Smith, to whose observing and inquiring disposition I am indebted for more enthusiasm in sight seeing than I would be able to get up on my own account. Our first professional visit was to the Medical Department of venerable old Trinity By means of letters of introduction presented us by our esteemed friend, Dr. Dyas, of Chicago, we were at once placed "*en rapport*" with the Faculty, for whose kindness and attentions we are under many obligations. Our time being limited, we confined ourselves mainly to the examination of the museum, which, through the politeness of Dr. Conner, the curator, we were enabled to look over quite thoroughly and understandingly. The collection is very large, and embraces almost every thing which can possibly serve to illustrate natural science. Prof. R. W. Smith's collection of bones is particularly unique and instructive. We were shown three specimens showing union by bone of fractures within the capsule of the hip joint; but in each instance there had been impaction. Also an instance of reunion by bone of a fractured patella. A remarkable specimen of stalactiform exostosis was shown of an individual who died at the age of one hundred years, every joint of whose skeleton is anchylosed, excepting the right wrist; this is said to have escaped

the accident because of his inveterate habit of whist playing, which ruling passion remained strong to the last. The joints are literally bridged over by adventitious bone having taken the place of the connective tissues of some of the muscles, as the complexus of the neck is now represented by bone. In fact, he must at some time have been confronted by the head of Medusa. Another remarkable piece in this collection is the skeleton of a man of the height of eight feet six inches, *without stockings*. He died at the age of twenty-three years. The bones are evidently in a pathological condition, for the shafts of the long bones are so soft as to be readily penetrated by the blade of a pocket knife. Altogether this is a very rare collection.

We next presented ourselves at the doors of the College of Surgeons, where we were kindly received by Prof. Hargrave, a venerable gentleman of prepossessing appearance and kindly manners. He showed us around a few moments, and then introduced us to Prof. Barker, who selected and explained to us the representative and rarest specimens of this classified and truly magnificent assemblage of exponents of anatomy, physiology, and pathology. Specimens for practical use in teaching are more numerous and better in this than in the museum of Trinity. On the next day we were honored with an invitation to visit Stephens Hospital, where we were fortunate enough to meet with a full corps of medical and surgical gentlemen, called together on the occasion of its being operating day. Prof. Robert McDonald officiated. The principal operation was the removal of a schirrous breast. He is a graceful, and no doubt a skillful operator — however, the removal of a breast is scarcely a test of the latter qualification. We were so fortunate, on this occasion, as to make the acquaintance of Prof. McDonald, for whose subsequent kindness and attention we can not express too much obligation. He showed us the most interesting cases in his wards, among which was a case of epilepsy of eight years' standing, now under complete control by the use of *Bromide of Potassium*. He is a firm believer in the efficacy of this drug in this horri-

ble affection, but uses it in large doses — say a drachm every twenty-four hours. I was happy to learn that the Dr. is an uncompromising opponent of the indiscriminate use of *Mercury* in syphilis. He discoursed very learnedly and interestingly on this subject, the principal points of which Dr. Smith has taken notes of, and will communicate in due time.

Stephens Hospital has 300 beds, and notwithstanding it was built long ago, is well ventilated and salubrious. "The Misericordia" is a new hospital, and built after modern notions of ventilation, and, in fact, is a model of beauty and perfection, We were not fortunate enough to meet the attending staff, but were shown about by the *interne*.

I had an opportunity of exhibiting blood corpuscles with my illuminator, and am happy to say that it performed well, much to the astonishment of the beholders. Prof. McDonald invited us to his house for that purpose, where every facility was offered for a successful demonstration. I also showed it to Prof. John Hughes Bennett, of Edinburgh, who seemed very much surprised at the result, and made a drawing of human blood corpuscles with the newly discovered elevation in the centre of the concavity of the discs.

Altogether, we were very much pleased with Dublin and Dublin people. The city contains nearly 460,000 inhabitants, and is, for the most part, regularly laid out. The river Liffy passes through the centre, and is frequently spanned by beautiful arched stone bridges. The inhabitants seem more thrifty here than elsewhere in Ireland; there is less of obtrusive poverty than at Queenstown, Cork, and the interior. In fact, in some parts, the beggars follow me like hungry wolves, and will not be appeased without some pennies. To the reflecting mind, the contrast in the condition of the different classes in Ireland is painful to behold. Some people seem to have all they desire, and more than they need; but this otherwise fine picture of competence and contentment is spoiled by the ever present skeleton-limbed aboriginal heirs of the soil.

PHILADELPHIA CORRESPONDENCE.

PHILADELPHIA, June 20, 1868.

To Chicago Medical Journal.

I have had a very interesting case of burn produced by action of condensed lye, and intended reporting it for your columns, but will wait till next No., as it has not yet passed its dangerous point. I therefore resume the account of the clinical cases.

M. J., age 52.—Carcinoma of left mammary gland of eighteen months' standing. Elliptical incision made, and tumor removed. Parts united nicely, and patient discharged.

W. E., age 38.—Encephaloid involving the antrum of Highmore. Incision made, and the upper maxilla of right side was extirpated. Paralysis of the face followed, on account of the division of portio dura nerve. The parts united well: the patient's general health improved materially, and he was discharged.

E. L., age 17.—Has a very rare congenital growth. An elephantiasis surrounded by hair; a pendulous tumor on left knee, flabby, and the hair grows long and thick around the entire surface of the tumor, Removed, and after the union was complete patient was discharged, cured.

R. I., age 30.—Enlargement of the lymphatics, with slight softening; large swelling in parotid region in front of the left ear, below the angle of the jaw, and extending as far up as the zygoma. For five years patient has been thus affected. An incision was made directly over the centre of the tumor in nearly vertical direction, and the entire tumor was removed. Patient discharged, well.

M. M., age 42.—Has had a schirrus removed from left mammary gland three times, and now a fourth growth has appeared over old cicatrix. Tumor removed.

G. C., age 38.—Syphilitic disease of left testicle. An incision was made from the external ring, bringing it down on the inside. As soon as the knife was introduced, a large stream of water gushed out. The spermatic cord was tied with a silver ligature. The patient lost but a very small amount of blood. He was placed upon

℞ *Hydrarg. Bichlor*, gr. $\frac{1}{12}$
Sodii Iodid, gr. vi.

three times a day, and did well. Twenty-seven days after the operation he was discharged.

J. M., age 7.—Stricture of œsophagus. Drank some lye about five months ago, and since that time has been unable to swallow without much difficulty. A bougie was inserted, and constriction was found to be very narrow. Bougies of various sizes were introduced, from day to day, for three weeks, at the end of which time patient was discharged, cured.

Yours, E. R. H.

SADORUS, Champaign Co., Ill., April 28, 1868.

DR. J. A. ALLEN — *Sir*:—In one No. of the CHICAGO MEDICAL JOURNAL for 1864, I saw an article from you, on cerebro-spinal meningitis, or as it is commonly called, spotted fever. There is, and has been, some of the same prevailing in this locality.

In all the cases I have seen, it is ushered in by a chill, or shivering, with severe pain in the head, or some part of the body, or one of the limbs.

In most cases, the head is drawn back, with extreme sensitiveness of back bart of the neck and spine.

The extremities are very cold, and I find great difficulty in getting up reaction.

In some cases, vomiting is very obstinate; water scanty, with strangury.

Pulse weak, and often slower than in health.

In most of the cases I find the pupil of the eye dilated, but in one bad case I had it was normal.

In all the cases I have met with, I find the patient very sore to the touch, or motion, and it is sometimes the case that one side is more so than the other. In two cases treated in one house, one, a child of four years, I found the left side the most sensitive, and in the woman it was the reverse.

In two cases, the left side of each was paralyzed; one a boy four years old, the other an adult woman. In the boy, the breathing was spasmodic, and you could see that one side of the chest expanded to an unnatural size, while the other remained stationary. Neither could I detect that any air passed into the lung.

Most of the cases are delirious, but not of an active form.

In the worst attacks reactions do not take place, but the poor sufferers soon sink into a profound coma, and death comes to their relief.

Usually an eruption makes its appearance (sooner or later), of a singular character. It does not look like measles, as one writer has said (in JOURNAL of 1863). I found by pressing on them that they nearly disappeared. It comes nearer resembling purpura, than measles or bullæ. I look upon it as a disintegrated condition of the blood.

The cases that have fallen under my care have led me to think it a disease of the blood (or a poisoned condition of the vital fluid, with a peculiar affinity for the membranes of the brain and spine).

Nor is this strange, when we take in consideration the cerebro-spinal centre.

It is not an acute disease, but sub-acute (at least, I have so considered it.)

It is a very deceptive disease, leading nurses, and, I fear, too frequently, physicians, to think the danger passed, when in reality I look upon that deceptive remission as a bad omen.

I have used the following treatment: *Capsicum* in full doses, *Opi* in moderate, for its stimulant effect; *Camph.; Tinc. of Canthar.;* tonic doses of *Quinine*, and (the cases are in a malarial district) *Tinc. Iron.* On account of the sedative action of alcohol, I have been afraid to use it, and in the use

of the above I have in all cases given for the effect, and not for quantity. External, *Rubefacients*, with artificial heat, with due care to its effect, I find useful. Stimulants, internal and external, I find the best. Strong irritants to the spine and extremities. When the surface is dry, I find I can get up an action quicker by the use of hot water, used for a short time, than any thing else.

I have the part dried, and follow by strong rubefacients.

When the surface is moist, I use friction with the hand, and the strongest external stimulants. It is frequently the case that the patient will change from moist to dry several times during the day.

I see nearly all the writers call it cerebro-spinal meningitis. I must enter a protest to the name.

In Watson's practice, a note added by Dr. Condie, it is called typhoid pneumonia.

In most cases I notice a rapid disposition to dissolution of the blood.

I have not written this for publication, but to ask you, by private letter or through the JOURNAL, to give me all you can that is new in the way of treatment. In one bad case of spasms, I did not have any *Chloroform*, and nine miles from home. I used *Bromide of potassium*, which controlled them before the messenger returned with the *Chloroform*, and I did not use it.

Having been a careful reader of your valuable journal for the last four years, and having a high regard for your opinion, I have taken the liberty to ask of you a little time in the consideration of the article, and if not asking of you too much, will be pleased to hear from you on the same, through the Journal.

This makes the fourth time that this disease has made its appearance in that locality. So far I have noticed that the weather has been much the same.

It has so far always been in the fall, winter, or spring, in sudden changes from cold to warm, accompanied with wet. As the article was not written for publication, I have not

taken the trouble to give all the symptoms, but have, I think, given sufficient to satisfy you that the disease under consideration is the spotted fever. Excuse me, my dear Dr., for thus intruding on your valuable time. A sincere desire for knowledge is my excuse. A. CATRON.

To the Editor of the Chicago Medical Journal :

DEAR PROF. ALLEN :—In the editorial observations concerning the report of the case of tetanus, treated by Dr. Baxter, you are correct in the statement that Prof. Gunn suggested the use of the *Calabar bean*. Dr. B. mentioned to me that Prof. Gunn did so. However, as I drew up the report hurriedly, from the notes taken at the time, and was even so uncourteous towards you as not to have copied it before laying it before you, I wish to have it understood that no injustice was meant to be done the learned Professor. The omission was as unintentional on my part as it is unsatisfactory. I may also mention that Drs. Hunt, Edwards, and McDonold assisted at the amputation. Yours truly,

P. CURRAN.

BOOK NOTICES.

LESSONS IN PHYSICAL DIAGNOSIS. By Alfred L. Loomis, M.D., Professor of the Institutes and Practice of Medicine in the Medical Department of the University of New York: Physician to Bellevue and Charity Hospitals, etc. New York: Robert M. DeWitt, publisher, No. 13 Frankfort Street. Pp. 159.

A very excellent little book, which we take pleasure in recommending to students and the profession as containing a satisfactory *resumé* of the subject.

CIRCULAR No. 1. WAR DEPARTMENT, SURGEON GENERAL'S OFFICE, WASHINGTON, JUNE 10, 1868. REPORT ON EPIDEMIC

CHOLERA AND YELLOW FEVER IN THE U. S. ARMY DURING 1867.

The most valid objections to the statistical method of observation in the field of medical science, are insufficient data and hasty generalization.

These objections do not apply to the volume whose title is quoted above. The data reported therein are furnished by more than thirty competent observers, at as many different localities, embracing an area of territory commensurate with the spread of the epidemics considered; constituting, as they do, one of the most, if not the most, valuable collections of information accessible to the general practitioner, these reports should be studied with care by every medical man interested in the solution of the problems of epidemiology.

The observations upon cholera seem to justify the following conclusions:

1st. That cholera in its movement follows lines of travel, and especially those of infected troops, and hence that it is transported, by preference, by human agency.

2nd. That troops under rigid hygienic regulations, designed to protect them against another danger (yellow fever) enjoyed an immunity against cholera not participated in by citizens surrounding them, not so protected.

These conclusions diminish the agency of *atmospheric transportation* to a minimum.

3rd. Its reappearance, without fresh importation, after a disappearance for six months, indicates a dormant vitality, or retained viability of the cholera element, under unfavorable atmospheric conditions, needing only a modification of these conditions to re-develop it into activity.

4th. The ratio of sick to population differed widely in different localities, whilst the ratio of mortality to the sick was nearly uniform every where, indicating the necessity of other elements than the specific poison *per se*, viz.: favorable personal and atmospheric conditions, to combine for the production of the result, infection, either of which elements being absent, the specific poison is inert. Were direct testimony

wanting, the above would supply a strong inferential argument in favor of a strict system of hygienic and sanitary regulations.

5th. It is transportable by means of corpses.

6th. It is retained and preserved in a state of potential activity in localities once infected, and subsequently abandoned.

7th. A definite period of incubation of ten to fourteen days is observed.

These deductions will be (perhaps) useful practically here as elsewhere, before, during, or after cholera epidemics. *Verbum sap.* (Board of Health) *sat.*

From a consideration of the reports on yellow fever, the following conclusions appear to be justified:

1. That the epidemic is exotic.

2. That the proximity of tide water is one of the essentials to its origin and self-developed activity.

NOTE.—Incidents occurring during other epidemics seem to modify this conclusion.

3. That of two foreign sources of importation, one, viz.: Mexico, appears to have supplied the poison in a more virulent form than the other — Cuba, (this conclusion probably applies peculiarly to this epidemic) the difference in the ratio of mortality being 12.5 per cent. (viz.: 40 and 28.5 respectively).

4. That the immunity conferred by acclimatization may be lost, to a great extent, by subsequent subjection to different climatic influences.

5. That the African enjoys a remarkable immunity against this, in common with all other malarial diseases, and, moreover, that his immunity against death is even greater than that against infection. The proportion of cases amongst the whites being 80, and of deaths 25 per cent., whilst amongst the colored these proportions were 50 and 7 per cent., respectively.

6. That the beneficial effects of a rigid quarantine as a pre-

ventive of yellow fever infection, have been demonstrated most satisfactorily.

7. That there is a period of incubation, which may be extended to twenty days.

It is to be regretted that some definite conclusions can not be derived from these reports, upon the subject of the treatment of these two diseases. For these we must be content to await the accumulation of still further evidence, before attempting to generalize.

In the mean time, it is to be hoped that the Surgeon General will continue to give to the professional world the results of the observations in his Department, in a form similar to the work now under consideration. W. H.

IMPORTANT INFORMATION.—A distinguished medical teacher in the late Medical Department of the University of Michigan denounced in strong terms before the class the gross negligence, and, indeed, criminality, which would endanger life in *post partum hæmorrhage*. Nothing is easier, he asserts, than to introduce the hand into the vagina and compress the aorta on the promontory of the sacrum, which will infallibly control the flow. It is fair to add that some of the younger members of the class doubted — a peculiar action of mind suggested by the idiosyncrasy of their accomplished Professor of Obstetrics. The first mentioned Professor, it is said, formerly undertook the cure of mammary cancer by manipulation of the sound breast. *Counter-irritation* by SEARING.

EDITORIAL.

Association.

In order to advance the real value of the JOURNAL to its readers, the editor has secured as permanent associate, WALTER HAY, M.D., whose valuable translations have from time to time appeared in the JOURNAL. He will assume the task of translations of valuable papers from foreign medical journals, and in each No. furnish an epitome of all that attracts professional attention in the Old World. It is unnecessary to say that Dr. Hay is one of the most accomplished medical scholars in this city, and the editor felicitates himself on having secured his association.

It is known to our readers as the intention of the JOURNAL to furnish exclusively *original*, or otherwise unattainable matter. Our associate will assist in securing this object. Any thing of professional interest which transpires in Europe will be furnished in our pages earlier than by any other medium on the Continent. The CHICAGO MEDICAL JOURNAL proposes to make any sacrifice to secure the *latest* and *best* for its readers.

News and Gossip.

The most astonishing case of monomania on record is the adhesion of Corydon L. Ford to the dilapidated fortunes of A. B. P. *Can* a man lie down with dogs and not get up covered with fleas?——Robert C. Kedzie, M.D., of Lansing, Mich., has been appointed to the vacancy occasioned by the resignation of Prof. Armor, in the University of Michigan. From our knowledge of Dr. Kedzie, we do not believe he will accept the position. If he does, we can only exclaim: *Quantum mutatus ab illo!*——Some gentleman from Detroit, whose name we can not recall, has been appointed to the chair of Surgery. G. D. Beebee, of this city, was overslaughed. ——A. B. P. wants to get a professorship in Brooklyn, but

the island gentlemen "can't see it." C. L. F. is adhering to him like a blister, to *draw* him there. P. thinks the Flints and Hamilton are "jealous of him!" Another instance of the fly on the bull's horn.——The Detroit College hangs fire as yet. But the gentlemen who have organized it are plucky, and understand "the situation." State institutions are always the tools of political hacks. Independence is the guarantee of success. The Michigan school proves the old adage: "Money makes the mare go;" but as she had in this case beggars on her back, of course she went to the devil. Good bye, D—s! ——They use *Carbol. acid* in Bellevue as a dressing, etc., in the proportion of 5 parts of *Linseed oil* to 1 part *Carbol. acid.* Or, as a wash, in the proportion of about 5 or 6 grs. to ℥i. water.

Our friend, Dr. R. S. Kelso, of Blooming Grove, Ill., in a private note, details the following interesting case of

Painless Miscarriage.

Oct. 10th, 1867, was called to Mrs. D., pregnant about five months. While engaged in her ordinary household duties, without the least premonition, there was rupture of the membranes, and discharge of the amniotic fluid.

11*th.* Ordered *Tinct. ergot* in drachm doses every hour for six hours, but without effect. In the evening I found the os uteri well dilated, right shoulder presenting, with protrusion of the hand and arm, though she had not felt a single pain, but only a weight, or dragging sensation, when she stood upon her feet.

Not thinking it necessary to turn, as the fœtus was small, I introduced a finger on each side of the neck, and brought down the head; then with slight traction, and a bearing down effort on her part, it was easily delivered. There was also another fœtus, with breech presenting, which I delivered in like manner, by bringing down the feet.

After waiting an hour, I administered *Chloroform*, and removed the placenta, which was so firmly adherent that it was impossible to detach it except by taking it away in pieces.

The lady had a good getting up, and in ten days was able

to perform her household duties, not having had a single pain from first to last.

I have since attended her in a miscarriage brought on in the same way, but she had a few pains.

Dr. Habershon, of London, in April and May last, treated a patient, now under our personal charge. Our patient preserved several of the original prescriptions, which are here inserted, as showing how they do these things in England. Their object is patent, and although simple enough in themselves, they differ in a marked degree from the formulæ which come from time to time from continental medical advisers:

℞. *Ferri arseniatis*, . gr. $\frac{1}{16}$;
Zinci Valer. . . gr. j.;
Pil. Rhei comp. . gr. j.;
Extr. Hyoscy. . . gr. j.;

M. *Ft. pil. Mitte* xvj. To be silvered. One to be taken every morning.

℞. *Potassii Bromidi* . ℥ ss.
Ext. cinch. fl. liq. . . ℥ i.
Spir. ammon. arom. . ℥ ij.
Inf. aurantii ad. . . ℥ vj.

M. A sixth part to be taken twice a day. S. O. H.

About three weeks subsequently, these formulæ were replaced by the following:

℞. *Acidi nitrici, dil.* . ℥ j.
Acidi hydrochlor., dil. . ℥ j.
Quinæ dis. . . . gr. vj.
Ext. Taraxaci . . ℥ ij.
Syrupi aurantii . . ℥ ij.
Aquæ ad. . . . ℥ vj.

M. A sixth part to be taken twice a day with water.

S. O. H.

Green Valley, Ill., May 1, 1868.

J. Adams Allen, M.D.—*Dear Sir*:—It becomes my painful duty to inform you of the death of O. S. Wood, M.D., a member of our class. He graduated in the class of 1859–60. He died at the residence of Mr. S. Woodrow, Green Valley, Ill., March 28th, 1868.

Very truly yours, Thos. C. Murphy, M.D.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—AUGUST 1, 1868.—*No.* 15.

ACADEMY OF SCIENCES, PARIS.—EXPERIMENTAL PHYSIOLOGY.

AWARD OF THE MONTYON PRIZE.

(Commissioners: MM. Longet, Milne-Edwards, Ch. Robin, de Quatrefages, Claude Bernard, Reporter.)

TRANSLATED BY WALTER HAY, M.D., ASSOCIATE EDITOR CHICAGO MEDICAL JOURNAL.

EVERY problem of experimental physiology is generally so complex, that it would be delusion or rashness on the part of any single author to take upon himself alone its solution and exhaustion. These subjects, ordinarily, are illuminated only by a series of associated efforts, in proportion as our means of investigation are perfected, and as experimental analysis penetrates more profoundly into the mechanism of phenomena. These remarks apply with perfect accuracy to the difficult question of the innervation of the heart by the spinal cord, which has already been the subject of the successive investigations of a great number of distinguished experimenters.

At the end of the last century, Haller* still considered the movements of the heart as being independent of all nervous influence. He founded his opinion upon the possibility of the

* Haller, Memoire sur l'irritabilité, 1777.

continuation of the circulation in an animal deprived of its brain, and upon this fact that a heart torn from the chest may beat and contract.

It was at the commencement of the present century that Le Gallois* discovered that the influence of the spinal cord is necessary to the maintenance of the pulsations of the heart, and he demonstrated experimentally that the destruction, either total or partial, of this nervous centre prevented the regular continuation of the circulation of the blood, even with the aid of artificial respiration.

Still later, Magendie, and a member of this commission† made use, for the first time, of a hæmometer, or cardiometer, with the intention to investigate and render more evident the modifications effected in the movements of the heart by the irritation of the spinal cord and of the nerves which originate therein. These experiments established the two following new results:

1st. The irritation of the sensitive spinal nerves induces a constant modification in the pressure of the blood, and an alteration in the pulsations of the heart.

2d. This action, which is of a reflex character, is not transmitted to the heart by the pneumogastric nerves, for it manifests itself even after the section of these nerves in the middle region of the neck.

In 1863, M. de Bezold‡ instituted experiments designed to throw light upon the influences which the spinal cord exercises upon the heart. This author established in his work two important facts. He showed first that section of the spinal cord between the occiput and the atlas, produced a very considerable diminution in the pressure of the blood in the large arteries, and that induces a retardation in the pulsations of the heart. He proved, moreover, that irritation of the cord below (posterior

* Œuvres de Le Gallois, édition de Pariset, t. I.: Experience sur le principe de la vie, et sur les mouvements du cœur.

† Comptes rendùs des séances de l'Académie des Sciences, t. XXIV, p. 1130.—Claude Bernard. Lecons sur la physiologie du systéme nerveux, t. I, page 271-275, 1858.

‡ Albert von Bezold, Untersŭchungen ŭber die Innervation des Herzens, 1863.

to) the section re-established the pressure of the blood, and caused it to ascend even above the normal amount, at the same time producing an acceleration in the cardiac pulsations. M. de Bezold believes that he has demonstrated by these last experiments, that the spinal cord reacts directly upon the movements of the heart, and it is at this conclusion, indeed, that he stopped.

But soon, MM. Ludwig and Thiry* combatted this opinion, by interpreting, entirely differently, the facts, otherwise exact, established by M. Bezold; and MM. Ludwig and Thiry deny all direct nervous action upon the heart, relying upon the fact that the spinal cord separated from the brain always exercises its influence upon the pressure of the blood even when all the cardiac nerves, which unite the heart with the cord, have been destroyed by the galvano-caustic method. They proceed even to prove that it is not necessary to excite the spinal cord in order to obtain the results already indicated, for simple compression of the aorta by restricting the area of the circulation may determine an augmentation in the manometric pressure of the blood. As to the acceleration of the pulsations of the heart, which coincide here with the increase to the resistance to the circulation, it will be perceived later that it becomes necessary to associate it with the special action of an accelerator—cardiac nerve, whose functions, hitherto, had not been determined. However this may be, MM. Ludwig and Thiry recognized, as did their predecessors, that irritation of the spinal cord induces modifications in the circulatory phenomena; but instead of admitting that this influence is exercised directly upon the heart, as M. de Bezold had done, they concluded, on the contrary, that it is directed primarily upon the peripheric circulatory system, by means of the vasomotor or vascular nerves to react thence upon the central organ of circulation in an indirect or secondary manner. Such was the status of the subject of the innervation of the heart by the spinal cord, when new experiments, instituted by MM. Cyon and Ludwig

* Ludwig et Thiry, Uber den einflus des Halsmarkes aus den Blutstrom, 1864.

are adduced to corroborate the conclusions preceding, and to develop their consequences. After having admitted, in fact, that the irritation of the spinal cord does not react immediately upon the heart, it remained to explain how the augmentation of sanguineous pressure, which it produces, could result from the direct action upon the peripheric circulatory system.

It is this mechanism that MM. Cyon and Ludwig have demonstrated, by showing that this influence of the spinal cord is transmitted through the mediation of vascular nerves, and especially by the splanchnic vasomotor nerves. Of all the vasomotor nerves of the body, the splanchnic nerves are evidently the most important, and the most capable of modifying the general circulation, by reason of the enormous blood-supply of the splanchnic organs to which they are distributed. MM. Cyon and Ludwig demonstrate by the aid of accurate experiments, that when the splanchnic nerves are divided, effects are obtained similar to those which result from section of the cord between the occiput and the atlas.

In the two cases, the manometric pressure of the blood diminishes rapidly and considerably in consequence of the paralysis of the vasomotor nerves, and the enlargement of the peripheric vessels which retain the blood in the organs, and effect thus a depletion of the central vascular system. If the peripheric extremities of the divided splanchnic nerves be then irritated, the manometric pressure of the blood is perceived to increase and ascend by reason of the contraction of the splanchnic vessels which drives the blood from the abdomen, where it was accumulated and carried back in a relatively increased quantity, into the cardiac system. Lastly, after section of splanchnic nerves, irritation of the spinal cord separated from the brain, induces no longer, or only to a very insignificant extent, augmentation of the pressure of the blood, because nervous influence can no longer be propagated to the vessels in order to determine their contraction.

After all the preceding facts, it remains well established that the augmentation of the manometric pressure of the blood,

could not be the result of the immediate and direct influence of the cord upon the central organ of the circulation; but it would be wrong to come to the same conclusion with regard to the acceleration of the pulsations of the heart, which are observed ordinarily in a manner coincident with the augmentation of the pressure of the blood. Indeed, M. Cyon has proved that these two orders of phenomena can be produced separately, for he has shown that after the section of the splanchnic nerves, when irritation of the spinal cord no longer induces an augmentation of sanguineous pressure, this same irritation still renders apparent the acceleration of the pulsations of the heart solely.

In following up the explanation of this last phenomenon, M. Cyon has even succeeded in establishing clearly that this accelerating influence depends upon an immediate action of the spinal cord upon the heart, and he has demonstrated that it takes places through the intervention of a special cardiac accelerator nerve, which emerges from the spinal column with the third branch of the inferior cervical ganglion.

The direct influence of the spinal cord upon the heart, first indicated by Le Gallois, then recognized by M. de Bezold, actually exists; however, it is necessary to distinguish in the physiological explanation, the fact of the augmentation of the manometric pressure of the blood, from that of the acceleration of the pulsations of the heart.

The augmentation of the sanguineous pressure, results, evidently from the influence of the spinal cord upon the vaso-motor nerves, whilst the acceleration of the pulsations of the heart is, on the contrary, the effect of the direct action of the cord upon the heart itself by the intervention of the special cardiac accelerator nerve. However, if this cardiac nerve, the accelerator of the pulsations of the heart, as well as the splanchnic and vaso-motor nerves, can be, as has already been stated, influenced by mechanical irritation of the spinal cord, it happens likewise, that in the normal or physiological state, these nerves are put into functional activity in an indirect or reflex manner by excitement emanating from the nerves of sensation.

We have already stated at the beginning, that irritation of the nerves of sensibility at the surface of the body, that is to say, irritation of the spinal roots, may react upon sanguineous pressure, and upon the pulsations of the heart. But these reflex actions are even more general, and the new point upon which we wish particularly to direct attention, is that movements take place in the peripheric, or central circulatory system, which are the results of the excitement of the nerves of sensation distributed to the internal surfrce of the heart. It has been known for a long time that the internal surface of the ventricles of the heart were endowed with sensibility: a member of our commission* had observed that by touching with a thermometer for example, the internal surface of the ventricles in sheep, the pulsations of the heart manifested immediately a great acceleration which could not be explained in this case but by a reflex reaction upon the cardiac accelerator nerve. But, besides this reflex accelerator influence upon the heart, M. Cyon has shown that there exists, still further, a reflex action at once distensive of the peripheral vessels, and depressive of the cardiac circulation, which likewise has for its points of departure excitement of the sensory nerves of the heart.

This important discovery is found detailed and developed in one of the memoirs upon the innervation of the heart presented by M. Cyon at the competition in experimental physiology, entitled "*Upon the reflex action of one of the sensory nerves of the heart upon the motor nerves of the sanguineous vessels.*† In this work, upon which the commission has brought to bear especially its criticism and judgment there is discussed in reality, the discovery of a new sensory nerve of the heart endowed with functions remaining up to this time unknown. We will first examine the anatomical arrangement of this nerve.

* Claud Bernard, Leçons sur les liquides de l'organisme, t. I, p. 120, 1859

† M. M. E. et M. Cyon ont communiqués a l'Acadamie (25 Mars, 1867), un résumé de leurs recherches sur l'innervation du cœur, exécutés sort a Berlin, dans la laboratoire de M. du Bois Raymond. Soit à Leipsic, avec le concours de M. le professor Ludwig. C'est M. E. Cyon qui a presenté les travaux aux concours de physiologie experimentale, et qui a mis les membres de la commission a meme de rénfeér ses expèriences.

In the rabbit, upon which M. Cyon has particularly experimented, this nerve ordinarily originates by two roots, one of which proceeds from the trunk of the pneumogastric, and the other from the superior laryngeal nerve. Starting from its origin in the superior region of the neck, the sensory cardiac nerve descends parallel to the carotid artery by the side of a filament of the cervical sympathetic, which accompanies, without ever uniting with it.

After having reached the thorax, the sensory cardiac nerve anastomoses with the filaments proceeding from the first thoracic ganglion, and is soon lost in the substance of the heart, or rather in the dense and compact cellular tissue which is situated between the origins of the aorta and the pulmonary artery. In order to experiment upon this nerve, it is laid bare in the living animal, in the middle region of the neck, then it is divided in order to experiment upon the two extremities successively, at the same time that a hæmometer (hæma-dynamometer) is applied to the carotid artery in order to observe the variations which shall supervene in the pressure of the blood. Galvanic irritation of the peripheric, or inferior extremity of this nerve, produces no pain, and remains absolutely without effect upon the manometric pressure of the blood, whilst the galvanic irritation of the superior or central nervous extremity, is on the contrary, painful, and induces in the manometer applied to the carotid artery a considerable depression of five or six centimetres in the column of blood.

This immediate reduction of the pressure of the blood under the influence of the irritation of the central and of the sensory cardiac nerve, is a constant result which has been reproduced under the eyes of the members of this commission; the sanguineous depression coincides exactly with the nervous irritation, and is removed as soon as that ceases. After having established this remarkable reflex of the sensory cardiac nerve upon the blood pressure, it is still necessary to explain its mechanism; it is to this that M. Cyon especially devoted himself. First, upon what organs did this reflex action exert

itself? Was it upon the general muscular system, upon the heart or upon the vessels?

In order to eliminate the influence of general movements (which, otherwise, would have augmented the sanguineous pressure instead of diminishing it), the rabbits were paralyzed with curare, which destroys rapidly the properties of the voluntary motor nerves, and permits the persistence, for a long time, of those of the vasomotor nerves, and of the nerves of sensibility, upon animals thus prepared, the irritation of the central extremity of the sensory nerve of the heart, no longer produced any reaction upon the paralyzed limbs, whilst this irritation induced in the manometer the same considerable depression of the blood of 5 or 6 centimetres. It was not any longer upon the heart that the reflex action bore immediately; for after having destroyed all the nerves which return to this organ—irritation of the central extremity of the sensory cardiac nerve still induced diminution in the blood-pressure. Thus we are induced, by the method of exclusion, to suppose that the reflex action ought to bear especially upon the peripheric vascular system; but an induction would not suffice: there was still wanting a direct demonstration, which M. Cyon has given, in pointing out, that when a section of the splanchnic vaso-motor nerve has been previously effected, irritation of the central extremity of the sensory nerve of the heart, no longer produces in the manometer the sanguineous pressure which was previously observed.

Definitely, every experimental analysis which precedes, demonstrates that, in the experience of M. Cyon, irritation of the sensory nerves of the heart reacts exclusively upon the vaso-motor nerves in order to produce a depletion of the heart, and, consequently, a diminution of the sanguineous pressure as indicated by the manometer. It is in order to express clearly this constant fact of manometric depression, succeeding irritation of the sensory cardiac filament, that M. Cyon has given this nerve the name of *depressor nerve of the circulation.*

Now, there no longer remains to be made any explanation, for the clear comprehension of the entirely special character of this reflex depressing action, which this sensory nerve of the

heart exercises. Physiologists are already acquainted with *direct paralyzing* influences, which, in place of inducing contraction of the muscles, paralyze and relax them. The paralyzing influence of the pneumo-gastric nerve upon the heart, is one of the most conspicuous examples of this singular nervous reaction. Now, at this time, we must admit there are *reflex paralyzing* nervous influences, and the reflex action of the sensory nerve of the heart is precisely of this sort. We have determined, indeed, by direct observation, the paralysis and dilatation of the peripheric arterial vessels at the moment when the sanguineous depression takes place under the influence of the irritation of the sensory nerve of the heart. It is impossible to give, at once, the explanation of these phenomena of nervous paralysis, because they are still involved in many theoretical obscurities, but they are, therefore, less worthy the attention of physiologists, for unexplained facts always contain the germs of the scientific truths of the future.

To recapitulate, the study of the innervation of the heart by the spinal cord has been established of late upon entirely new foundations, thanks to a series of investigations, of which we have believed it our duty to give a rapid epitome in this statement, for the reason that they are all associated, and each is necessary to the understanding of the other.

The discovery of the depressor nerve of the circulation, reveals to us facts of the highest importance, which are destined to throw a vivid and unexpected light upon the problem, hitherto so difficult and so complicated, of the physiology of the nerves of the heart. It has been shown that the heart can, by the aid of the nerves of sensibility with which it is provided, regulate, in some degree, its dimensions according to its necessities, by operating by reflex action upon the general circulation, and we can now comprehend how this perpetual equilibrium, which must exist between the central and the perpetual circulation, is established.

If the sensibility of the walls of the heart be excited by too great sanguineous repletion, there results an energetic reflex action which dilates the capillary vessels, and attracts the blood

to the periphery. If, on the contrary, the internal sensibility of the heart is too feebly excited, the peripheral vessels contract and force back the blood toward the centre of circulation.

All the discoveries of M. E. Cyon are conquests by the delicate and difficult method of vivisection. The Academy can not too highly encourage this physiological direction which alone permits us to carry experimental analysis into complex organisms in order to dissociate phenomena, and to apprehend their essential mechanisms. It is for this reason that the committee has unanimously awarded to M. E. Cyon the prize for experimental physiology for the year 1867.

After having regularly awarded the prize, to the work of which we have just now given a report, your committee believe it their duty to ask of the Academy a *second* prize in Physiology, in order to do honor to a series of investigations into the generation and dissemination of intestinal worms, the results of which are recapitulated in a publication by M. Baillet entitled: *Natural history of the intestinal worms of the domestic mammifera.* This work differs altogether from that which precedes it, and, as its name indicates, is a treatise upon Zoology rather than upon Physiology. However, many of the facts in the history of the propagation and migrations of intestinal worms appertain to physiology in this regard, that this history can only be comprehended through an acquaintance with the special properties of the tissues of these creatures, and by the determination, of the condition most especially favorable, in the midst of which these properties of tissues are permitted to be developed.

In order to restrict themselves to the spirit of the competition (concours) they will direct their criticism exclusively upon those portions of the researches of M. Baillet which refer to the embryogenesis and development of intestinal worms.

We will specialize, at first, a group of experiments, in which M. Baillet has studied the influence exercised by the surrounding media upon the development of the eggs and embryogene-

sis of certain species, at the same time that he has determined the remarkable powers of resistance with which these eggs and embryos are endowed. Whilst adapting them to different temperatures, whilst surrounding them with a liquid alternately pure or corrupt, M. Baillet has seen the segmentation of the yoke arrested, retarded or accelerated, the development of the embryos advance in a progressive manner or suspended, and that, too, upon several repetitions, without, apparently, damaging the embryos. He has thus been able to protract during eleven months, the embryonic development of certain species of ascaris, which, in their normal conditions, according to their temperature, would, in ten days or a month, pass this first phase of their existence.

Other experiments, which associate themselves with the preceding, show us the young ascarides, already formed, remaining stationary, under certain conditions, during a period which might be called indefinite. Mr. Baillet has preserved during nearly two years, under the water, or in wet ground, or simply upon plates of glass, eggs of four species. A. Megalocephala, A. Mystax, A. Suilla, A. Marginata, in which the well-formed embryos are active up to the last day. All these experiments are of a character to prove that the eggs and the embryos of intestinal worms are endowed with a vital tenacity which enables them to resist certain injurious influences of their surrounding medium, and of awaiting, in a latent phase of life, conditions favorable to their development, M. Baillet has rightfully insisted upon these interesting facts. He has been able also to extend his observations upon new species; but he had already been preceded in this path by M. Davaine and M. Leuckart. The first of these authors had determined the property possessed by the eggs of certain intestinal worms of being developed in the dry state; and in relation to the duration of the embryonic development, he had obtained results still more remarkable, for he had preserved in water during five years, eggs of ascarides lumbricoides containing embryos full of life.

M. Baillet has also made experiments with the view to

throw light upon the history of *sclerostoma equinum*, and of *strongulus filiaria* of the sheep. It results from these researches that the strongle whilst multiplying on the spot, also propagates itself from one individual to another by means of migration of its embryos. That they may be able to bear the hazards of the route, these are endowed with remarkable vitality. This considerable vital resistance of the embryo of the strongle, compared with the adult worms, had already been remarked in the last century by Camper, upon the strongle of the calf, and M. Davaine, who reports the fact, has first deduced therefrom the consequences which are relative to propagation and migration of these worms. But the experiments of M. Baillet are likewise very interesting, in that they have shown that the embryos of strongles can also, although to a less degree than the young ascarides, have the property of remaining stationery in their development, whilst they may not have found the medium for which they were designed.

M. Baillet has further performed numerous experiments upon the cestoids, entering largely upon the path opened by the two savants whose works were honored by the Academy in 1853.

Whilst confirming the general facts, of which we owe the knowledge to MM. Von Siebold, Van Beneden and Kuchenmeister. M. Baillet has been able to fill up a certain number of lacunæ, to resolve several difficulties which the labors of his prodecessors had left in the science, and to refute some errors which tended to propagate themselves, reinforced as they were by great names. But we will not follow the author in the examination of these question, which belong rather to the domain of Zoology than of Physiology.

To recapitulate: although the work of M. Baillet does not include, strictly speaking, physiological discoveries, however it is an important work which has the merit of having confirmed and extended experiments which are of a character to encourage general physiology.

The committee, in honoring the work of M. Baillet, has designed by encouraging zoologists in the experimental study of

the tissues of lower animals; and, on the other hand, by recompensing two orders of investigation, performed in totally different directions, it has desired to prove that it comprehends physiological science in its broadest sense, and that it accepts, as belonging to it, all those studies which contribute to the explanation of the phenomena of life. Such is the summary of the motives which have induced the committee to ask for M. Baillet a second prize of Physiology.

The committee has, moreover, directed its attention to a memoir of M. Moura, entitled "The act of deglutition, its mechanism."

The act of deglutition presents a decidedly complex mechanism, which, since the days of Hippocrates, has exercised the sagacity of a large number of physiologists. M. Moura, having at his service laryngoscopic experiment and observation, has assumed in turn the study of this physiological problem, and he has had the merit of adding interesting facts to this subject, already so frequently investigated by skillful experimenters.

From the summary of the researches of M. Moura, it results:

1. That deglutition is effected in a different manner, in man and in the dog.

2. As to the deglutition in man, the three periods assigned to the act should be reduced to two. According to M. Moura, deglutition really commenced only when the alimentary matters disseminated upon the tongue have arrived at the free edge of the epiglottis. From which it results that the passage of the food across the isthmus of the fauces is the last phenomenon of mastication, and does not really belong to the act of deglutition. During this passage only the lower third of the epiglottis closes the larynx; whilst the upper two-thirds remain elevated, and unite with the larynx in forming an orifice, and an irregular conduit into which the bolus is pushed back by the base of the tongue.

3. Fluids are collected into the same channel as the food, and are not introduced into the pharynx by passing over the sides of the epiglottis.

The committee accords to M. Moura an honorable mention for his experimental investigations into the phenomena of deglutition.

In conclusion, the committee of the Concours of Experimental Physiology, for the year 1867, decree the prize for experimental physiology to M. E. Cyon, for his work upon *the innervation of the heart by the spinal cord.* It asks of the Academy a second prize of experimental physiology to honor the investigations of M. Baillet upon the generation of intestinal worms in domestic animals. And it awards an honorable mention to M. Moura for his work on deglutition.

The Academy adopts the propositions of the committee.

SYPHILIZATION AS TREATMENT FOR SYPHILIS.

BY N. ROSENBERG, M.D., CHICAGO, ILL.

Case No. 1.—Mr. D. C.; aged 40; native of Ireland; saloonkeeper by occupation; habits intemperate. Applied at my office June 1, 1866, and gave as history, that he had contracted syphilis 10 years previous, and had been treated by various physicians, and taken a large quantity of drugs, containing, as he believed, more or less mercury. When I first saw him, he presented the following symptoms: face flushed and swollen; complained of great weakness; lower extremities swollen, and on the anterior aspect of both were large, deep ulcers of several years standing, discharging fœtid matter in large quantity, so he was obliged to have a room for himself. I commenced to syphilize him, June 1st, 1866, after the manner prescribed by Prof. Boeck, and continued for four months, when further inoculation failed. At this time the sores on the legs were entirely healed, and his general health, according to his own statement, as good as it ever had been, and has subsequently remained so. He now holds a place as conductor on one of the street cars.

CASE No. 2.—Mr. and Mrs. F. A.; natives of Germany; about 30 years of age; contracted syphilis in 1864; were treated for a long time in New York hospital, and after that by several physicians. Applied on the 8th day of May, 1866, presenting the following symptoms: the husband was very weak, had sore throat, and looked like a person suffering from consumption, and was unable to work, but had no sores on his body. The wife had several sores on different places, her eyes were affected, and she had a sickly appearance. Their child, two months old, died shortly before I knew them, of syphilis. I syphilized them the first time on the 8th of May, 1866. They left me, as completely cured, three months after. In September, 1867, they got a child, free from any symptoms of syphilis. The child is now ten months old, and is very healthy. It can be seen here in Chicago.

CASE No. 3.—O. J.; 35 years of age; native of Norway; contracted syphilis in 1860; was in the American army during the war, and treated by several physicians while there. He states to have taken a great deal of mercury, but without any benefit. He had several boils and large discharging sores on many places. I commenced to inoculate him on the 12th of February, 1866. He went off as perfectly cured after treatment for three months and a half, and feels now better than he ever did, according to his own statement.

CASE No. 4.—Mr. B. C. G.; 59 years of age; native of America; contracted syphilis in 1850; treated by several physicians; taken a great deal of mercury, and was given up by them as incurable. He had big discharging sores all over, could not wear boots, and could scarcely walk. I commenced to inoculate him on the 16th of May, 1866. The inoculation had a great effect upon him—the sores healed, and by and by he left me as completely cured, after four months treatment.

CASE No. 5.—Mrs. L. McK.; 44 years of age; native of Ireland; contracted syphilis twelve years before I saw her; she confessed to have been a prostitute; had big sores on different places, and had been treated by many physicians. I commenced to inoculate her in 1865. She got perfectly well in three months.

Case No. 6.—Child, Miss O.; 10 years of age; native of Norway; supposed that she contracted syphilis in a privy, about four months before she came to me, at which time she was emaciated and anemic; she was rather poorly developed; extensive ulceration on both labia majores, with several smaller ulcers, and quite a number of condylomes about the rectal orifice; had had sore throat two months previous, but no eruptions on the skin; she had never been under treatment; her general health was poor, and she suffered great pain from the above mentioned difficulties. I inoculated her the first time on the 9th of July, 1866, and continued to treat her for a period of three months, when the sores were entirely healed, the condylomes disappeared, and her general appearance so much improved, that she could hardly be recognized.

Case No. 7.—I. T.; 20 years of age; colored man; native of America; contracted syphilis five years before he came to me; had been treated by several physicians; he stated to have suffered much pain in the breast; had big discharging sores under both his feet; was very weak, and could scarcely walk. I commenced to inoculate him on the 30th of July, 1866, and he was perfectly cured after three months treatment, and he is now fatter and stouter than he ever was.

Case No. 8.—Mrs. C. L.; 45 years of age; native of Norway; contracted syphilis in August, 1867; was treated by an eminent physician here in this city for five months, but with no apparent benefit. I commenced to inoculate her on the 1st of March, 1868. She got completely cured in two months.

I have treated about three hundred syphilitic cases here in Chicago by syphilization. Many of those were given up as incurable. The treatment works here with astonishing effect, and I believe we shall, by syphilization, be able to cure all cases of secondary and tertiary syphilis.

PROCEEDINGS OF THE CHICAGO MEDICAL SOCIETY.

Since the last report of the proceedings of this society, many instructive cases have been reported at its weekly meetings. During the summer the meetings will be held monthly. The following are are among the most interesting cases in which pathological specimens were presented:

A case of placenta prævia, in which the fœtus was born with the membranes intact.—Dr. Wanzer presented a fœtus of the eighth month, covered with the placenta and enraptured membrane, which had been delivered with the double complication of breech presentation, and placenta prævia. The patient had suffered from frequent hæmorrhages for two months previous to the delivery, and yet made a rapid recovery.

Grey hepatization of the lungs not attended with cough.—Dr. Durham exhibited the lungs of a female patient, who had for some months suffered from diarrhœa, abdominal pains and ascites. The diarrhœa was the first marked symptom preceded by considerable debility. There was absence of pain in the chest and cough.

The autopsy revealed not only tuberculous disease of the mesenteric glands, with peretonitis, but also most extensive gray hepatization of the lung, with purulent deposits.

Singular fracture of the vertebra.—Dr. Bogue presented the vertebra of a patient at the Cook County Hospital, who had fallen in front of a hand-car in rapid motion, so that the hand-car, in passing over, doubled him forward, producing a fracture of the last dorsal vertebra.

There was complete paralysis of sense and motion below the seat of fracture. The patient lost control over the evacuations of the rectum and bladder, and suffered from great prostration and enormous bed sores.

Death followed in thirty-seven days.

At the autopsy the body of the bone was found broken, the upper fragment having slipped forward and upward. The ribs were dislocated from their attachments. There was quite firm union of the bony tissue with absorption of the intervertrebal substance.

The canal was still open, although very irregular at the point of fracture.

Ciliary nerves.—Dr. Holmes presented an eye which he had removed for a painful irido-choroiditis of thirteen months duration, the pupil being closed with lymph and the globe atrophied.

The specimen had been macerated two days in water, and then placed in a solution of bichromate of potash. It was specially interesting as presenting to view the minute branches and meshes of the ciliary nerve, as they lie embedded in the choroid. The choroid and sclerotic separated almost spontaneously on bisecting the globe, and yet were held together by the nerves at the points where they passed through the sclerotic. These minute nerves could be seen on slightly raising the choroid from the sclerotic. With a magnifying glass, the rich supply of nervous fibres in the ciliary bodies, could be distinctly seen.

Removal of a large uterine tumor.—Prof. Miller exhibited a large uterine tumor, of which he gave the following exceedingly interesting history:

Mrs. ——, a German woman, 23 years of age, was delivered of a child sixteen months ago. Eight months subsequent to this confinement she was seized with pains, and supposed she had a miscarriage, a midwife being in attendance. For a period of eight months she suffered from frequent attacks of hæmorrhage, pain in the abdomen, and considerable exhaustion. She consulted several physicians of well known skill and reputation, who diagnosticated the disease as inverted uterus.

Prof. Miller was first called to the case to reduce inversion. Upon making an examination, however, he discovered that the supposed inversion of the uterus was really a large tumor protruding from the os.

The growth was so long and its attachment so broad that it was almost impossible to introduce the sound into the cervix, without at the same time drawing down the tumor. If this was done, the sound could be readily passed nearly two inches and a half into the uterus.

Although the attachment of the tumor was very broad, there was little difficulty in applying the chain of the ecraseur, and removing the whole growth with scarcely any loss of blood.

The tumor was fibrous in character, measuring three inches in its long, and two in its short diameter.

The specimen presented an exception to the rule that such tumors are usually attached by narrow pedicles.

REMARKABLE CASE OF PLACENTA PRÆVIA,

Spontaneous Delivery and Recovery. Related to the Chicago Medical Society, with pathological specimen presented. By HIRAM WANZER, M.D., *Chicago, Ill.*

MR. PRESIDENT AND GENTLEMEN:—I have a pathological specimen—a fœtus, at about six and a half months, for the examination of the society this evening. Having not been in attendance, nor an inspector of the parturient process, I am obliged to the family for my data in the antecedents of the case.

I was called on the 19th of April ult., at 8 o'clock A. M., to Mrs. B——, an American, aged 23, who, just previous to my arrival, had given birth to this fœtus. She stated that her previous health had been good; that she had been married eight years, and given birth to three children; that her previous gestations and the delivery were natural; that nothing abnormal presented in this case, until eight weeks previous, when she began flowing, and during that time she had lost daily as much blood per vaginam, as she was accustomed during her catamenial period; that eight days previous, she

began to have some labor pains, commencing at about noon and disappearing at midnight, when there was quietude obtained; that the periodicity continued in this manner for four days, when more active pains supervened, recurring frequently and with greater severity until the morning of its birth. The hæmorrhage being the same in quantity during her parturient efforts as before.

The second day previous to my being summoned, a German midwife was called, who has informed me that the os uteri was rigid and undilated. Her services being dispensed with, an intelligent physician was sent for, who administered *Morphia*, in order that she might procure some rest from her long fatigue. He states that there was a degree of rigidity of the os at the time, and that it only dilated to the size of a three cent piece; that the pains were considered inefficient, and of a neuralgic character. I found the following morning she had given birth to this fœtus, as previously stated, with the membranes entire. It was a breech presentation; the placenta, as you see, is firmly attached by the arterial and venous radicles of its structure with the chorion, excepting its free peripheral border, where it is slightly detached. This firm coalescence extends over the nates of the child, on the right side as far as the shoulder, also on left side as far as the crest of the illium. The maternal surface of the placenta denuded of the membranes, has a fleshy look, and is divided into numerous sulci or small lobes. Its extensive surface of attachment to the mucus membranes of the neck body, and a portion of the fundus of the uterus. On the right side, expanding by the physiological growth of the child, and with the regular development of the uterus, accounts for its thinness, and in part for the anomaly it presents. Will the society explain how far the specimen is pathological, and the cause of such expansion, and extensive surface of attachment? Not only rare, as I believe, and interesting as it is, might it not have arisen from the abnormal shortening and traction of the umbilical cord, and through the diaphanous membranes, where, covered by the placenta, are seen the fœtus *in situ*

floating in the amniotic fluid with the cord (tense) around its neck. The mother states that she felt motion in the child from the time she began flowing to the time of its birth. The patient, at the time of my arrival was flowing considerably, which completely subsided under the administration of *Tinct. Ergot*, pressure over the uterus, and moderately tight bandage. Her countenance wore a somewhat blanched appearance, but there was not that degree of anemia we might anticipate from such prolonged hæmorrhage. After sufficient contractility of the uterus was secured, I administered every four hours, 20 gtt. *Tinct. Ferri Muriatis*, alternated with wine and nutritious diet. On the fifth day she was convalescent, and able to attend to her household duties. Authors, both ancient and modern, have agreed that among all the causes which make labor difficult, there are are none fraught with so much peril to the mother as placenta prævia. The ratio of maternal mortality being even greater than the two most fatal epidemics of yellow fever and Asiatic cholera, and more than twice that of lithotomy.

Gottleib Thacher, professor, of Leipsic, wrote a dissertation in 1709. One of his observations was upon the death of a woman from flooding, at the end of pregnancy. The autopsy revealed that the placenta was attached to the cervical portion, and closed the os uteri. The membranes were unbroken, and intimately connected with the whole of the internal surface of the uterus.

Dionis, who wrote in 1721, while recognizing the fact that the placenta is often found presenting the os uteri, controverts the opinions of Mauricean, that its detachment was caused by the shortening of the cord.

Lemotte says there are none more perilous than that in which the afterbirth presents before the child.

Hæmorrhage, says Delneyre, is a fearful occurrence to a woman. It may be slight or considerable, dependant upon the partial or total detachment of the placenta during convulsions, with which the mother may be attacked, or from the attachment of the placenta upon the os.

Conquest says that hæmorrhage from this cause, places the woman in the most imminent danger.

Dr. Collins says the attachment of the placenta to the mouth of the womb, is one of the most dangerous complications to be met with in the practice of midwifery.

Dr. John F. Ramsbotham says, a woman placed in this perilous situation, therefore, holds her life under a very uncertain tenure.

Mr. I. Ingleby remarks that the patient is necessarily exposed to danger of a peculiar kind, imminent in degree, involving the deepest responsibility, and demanding the exercise of the highest judgment.

Madam La Chappelle remarks, for these reasons it follows that hæmorrhage, which depends upon the adherence of the placenta to the internal orifice of the uterus, is one of the most dangerous accidents to which women are exposed during their pregnancy.

The able writings of Cazeau, Dr. F. Churchill, and Prof. C. D. Meigs corroborate the opinions of those distinguished writers mentioned.

I will not enter this evening upon the pathology and treatment of this most appalling accident in the parturient woman, as each case has not only its own specific type, but also its indications for treatment. I will simply confine myself to the case reported, and I accord fully with the testimony left us by those eminent men mentioned. The question suggests itself, had we the early management of the case, would it have been prudent to expedite the delivery, or leave her as she was to the unassisted powers of nature, which managed the case so well without our interference. As before stated, the hæmorrhage never exceeded her daily catamenial loss. The patient being robust and of unusual constitutional vigor, under the circumstances, I think non-interference was strongly indicated. The extensive surface occupied by the placenta would have been a barrier, in rupturing the membranes and delivery by version without perforating them, which would have been no easy matter, bound as it was to them by the pla-

cental vessels; and, furthermore, it would have exasperated the hæmorrhage. The hæmorrhage, no doubt, occurred from the gradual and partial detachment of the placenta from the uterine walls. The want of the dilatation of the os, the physician states, was fourteen hours previous closed and rigid. It was in consequence of the firm attachment of the placenta to the os, hermetically sealing it, except at the point whence the hæmorrhage proceeded. May not this have been conservative, acting as a tampon for the prevention of an exhausting hæmorrhage, until the complete detachment of the placenta, the dilatation of the os, and lastly the expulsion of the fœtus? I think cases of spontaneous delivery in placenta prævia are very infrequent.

BILIARY CALCULI.

BY E. W. BOYLES, M.D., OF CLAY CITY, ILL.

Called, June 6th, 1867, to see Mrs. W.; aged 50 years; nervo-bilious temperament. Found her suffering intense pain in right hypochondriac region; nausea and vomiting; pulse quick and feeble; bowels constipated; urine light colored. Upon examination found considerable enlargement and tenderness in right hypochondrium, extending into the umbilical and right lumbar regions. In fact, most all of the symptoms characteristic of acute hepatitis. Owing to the suddenness of the attack, and the paroxysmal character of the pain, I was led to suspect the presence of gallstones. Stated my opinion accordingly, and subsequently ordered the dejections examined therefor, but none were found. I gave opiates, and ordered fomentation. Called again next day and found my patient much relieved. She got up in a few days and attended her usual household duties, but tenderness and enlargement of the liver still remained to a considerable degree. I put her upon the use of nitro-muriatic acid—could not use mercurials, owing to the great susceptibility of the system thereto.

In September she was again confined to her bed for a few days with an attack similar to the first, though not so severe; after which she resumed her household duties. Treatment continued, together with various local remedies, such as iodine ointment, pustulation, blistering, etc.

January 4th, 1861, I was again called to see her. Tumor in the side larger, and more circumscribed. I became convinced that an abscess was forming, and used means to hasten the process of suppuration, fomentations and poultices, but the tumor remained hard—no fluctuation. I began to fear schirrhus; patient considerably emaciated and weak, but no appearance of jaundice. Digestion remarkably good, and plenty of bile in the stool.

The last of February, tumor began to point at the upper border of right lumbar, near the line of the umbilical region. March 1st, discharging slightly through two small sinuses about one and a half inches apart, which openings I enlarged with the lancet, after which discharged freely a fluid about the consistency and appearance of glycerine, which continued, producing great prostration; gave supporting remedies freely, in which iron predominated.

May 2nd, I was sent for again. Patient said to be suffering a great deal of pain; discharges from the abscess ceased, bulging between the openings — thought it must be lanced again. I was not at home at the time, and did not call until next day, when I found four gallstones had been discharged through the inferior opening, the first one being as large as a bird's egg, irregular in shape, weighing grs. xvij; the others about one-half the size and pyramidal in shape, with smooth, bright surfaces. Upon manipulation, four others were discharged whilst I was there. Others were discharged from day to day, until one hundred and six had come away, weighing, in the aggregate, two hundred and fifty grains. Most all of them pyramidal in shape, with smooth, bright surfaces. What seemed strange to me, there was no appearance of bile in the discharges from the abscess until May 20th, and then for a few hours only, and twice since that time, and at each there was more pain and gastric disturbance.

The upper opening has entirely closed, and the discharge from the other gradually growing less. The patient is rapidly improving, with every prospect of complete recovery; was at my house to-day (June 25th, 1868) visiting, having rode two miles in a spring wagon.

NOTES AND OBSERVATIONS IN GENERAL PRACTICE.

BY JOHN FORMAN, M.D., EDINBURGH.

Paper I.—Acupressure.

Acupressure, first proposed by Sir James Simpson, of Edinburgh, may be truly termed a great acquisition, deserving the attention of every surgeon in the land.

It has been proposed in Edinburgh, also in the Aberdeen Infirmary, by Professor Pirrie and Dr. Keith, to be at once as reliable a hæmostatic agent as the ligature, possessing the advantage of much easier application, no assistant being required as in the case of the ligature. But its great superiority is the acquisition of union by the first intention, or by primary adhesion without the formation of pus. In the case of the ligature we are all aware that such a happy result can not be obtained, the laceration of two of the coats of the artery, the strangulation and destruction of the external coat, the ligature running for several days as a seton in the wound, under suppuration more or less inevitable, consequently heading by the first intention can not be obtained. We are, therefore, warranted in urging the great superiority of acupressure over the ligature as a reliable and expeditious hæmostatic agent with the additional and most important advantage of promoting healing by first intention.

Notwithstanding a certain amount of lukewarmness (and, in some quarters, strong opposition), which every surgical

discovery has met with more or less in its infancy, acupressure has already obtained the confidence of, and is practiced by many British surgeons of eminence, and its youthful vigor bids fair to lead us to anticipate, that ere long it will become the exclusive method for arresting hæmorrhage in the medium and larger sized arteries, torsion being quite as effective, and more simple and expeditious for the smaller ones.

I will briefly state the various modes proposed by Professor Simpson.

The first method is performed by passing the needle from the cutaneous surface, directly through the whole thickness of the flaps, and causing it to emerge a little to the right side of the tube of the vessel. The projecting end is then pressed firmly against the site of the artery, made to rëenter the flaps close to the right side of the vessel, and pressed until it emerges on the surface of the skin. In this method, the artery is compressed against the component parts of the flap.

The second method is performed with a needle threaded with twisted iron wire, and, unlike as in the first method, the skin is not interfered with; the needle is passed above instead of below the artery. The needle is pushed twice into the soft tissue of the wound. The first point of entrance is at a little distance from the artery to be acupressed, and the first point of exit close to it. The second point of entrance is close to the vessel on its opposite side, and the second point of exit at a little distance. Between the first point of exit and the second point of entrance, the needle is made to bridge over the trunk of the artery, and care must be taken before making the needle rëenter the wound to pass down sufficiently to close the artery. The needle can be removed at pleasure by pulling the twisted wire.

The third method requires for its performance a threaded needle, and a loop of inelastic wire, and consists in effecting compression between the needle below, and the loop above the vessel. The needle is entered a few lines to one side of the vessel, and pushed behind it, caused to emerge a few lines beyond the vessel; the loop of wire is thrown over the point;

brought over the trunk of the artery, and behind the stem of the eye-end of the needle, drawn sufficiently to shut the vessel, and fixed by a half twist around the needle. It is important in the performance of this method, to avoid including an unnecessary amount of tissue; not to draw the wire tighter than is absolutely necessary to close the artery. By pulling the twisted wire the needle is removed, and the loop being liberated, is easily withdrawn.

The fourth method differs from the third, inasmuch as a long pin is substituted for the threaded needle. Little as the difference may appear, the pin should be substituted in all cases where the form of the wound, and the position of the artery admit of the head of a pin being conveniently, and without straining of tissue, kept without the wound. The pin is easier inserted and withdrawn.

There are several other methods adopted by various surgeons. Such as the twist and ring, adopted by Professor Pirrie and Dr. Keith, of Aberdeen; and others will, no doubt, in time suggest themselves. In the meantime, the third and fourth methods are the most satisfactory and efficient means of arresting hæmorrhages we possess.

According to the magnitude of the operation in which acupressure has been adopted, the needles or pins are withdrawn in from four to forty-eight hours after its performance.

It is believed by those who have adopted this method in a large number of cases, that less than four hours will be necessary in those operations.

In the minor walks of surgery, such as wounds over the temple, the introduction of a needle under the temporal artery, and a thread passed over it in the form of a figure 8, from eye to point, and secured, is the most efficient mode of arresting the hæmorrhage. In the same manner the needle may be passed under the facial artery as it crosses the lower jaw to arrest troublesome bleeding from deep gashes in the cheek; and in cases of wounds of the face, where it is important that little or no mark should be left, a fine needle, passed obliquely from one edge of the wound to the other, and a thread passed

over it in the manner already described, when heating by first intention invariably ensues, and little or no mark remains.

In cases of deep laceration and severe bruising of the face from falls or blows, on removal of the needle, the thread may be left to form a scab, and painted over daily with a weak solution of carbolic acid and glycerine. In such cases, where much bruising has been sustained, more or less suppuration is unavoidable. This is, however, very much lessened by adopting the carbolic acid dressing, either in conjunction with glycerine, or in the form of paste, as recommended by Professor Lester, of Glasgow, which seems to destroy most effectually the germs, whether they are generated in the atmosphere or in hospital wards, and very materially curtails pus formation, and accelerates the healing process.

In scalp wounds our colleges have hitherto taught us to treat them as follows, viz.: To remove the hair with scissors, a considerable portion of the scalp to be shaved to allow plaster to adhere—the clots of blood to be removed, the wound to be well washed, and should bleeding be troublesome, torsion of some of the vessels should be resorted to. When the edges are brought together, adhesive plaster and a cold compress are to be applied. A third injunction is laid down, not to use ligatures or sutures of wire, lest erysipelas should intervene. Contrast this with the following simple, expeditious and highly satisfactory method. In such a case the clots are removed, the wound thoroughly washed, a pin a little longer than the extent of the wound is inserted through the skin at the lower angle of, and about a quarter of an inch from the edge of the wound. The pin is then run along the raw surface of the lip, till the upper angle is reached, when the point of the pin is made to appear through the skin at the proper level and distance from the raw edge; then a few turns of ordinary linen thread are passed in figure 8 form, from head to point of the pin. All bleeding vessels are thus completely compressed between the pin against the tissues below, and the thread above. A second pin is applied in a similar way along the

other lips of the wound, and thread applied over it, same as in the first. The edges of the wounds are brought together, and kept in close apposition by a few turns of thread passed from the head of one pin to the point of the other, and *vice versa*. The hair is then brought over the wound, and the dressing is complete. The pins may be withdrawn in from twenty-four to forty-eight hours, and the thread allowed to remain until healing by first intention is completed, and no fear of erysipelas or other untoward symptom need be anticipated.

PAPER II.—RADICAL TREATMENT OF CHRONIC BLENNORRHŒA.

CASE 1.—Mr. ——; aged 36 years; tall and spare, of regular habits; states that he has had gonorrhœa four times; first attack at the age of 18 years, and that each renewal was with stubborn gleet, and for the last six years he has had an unremitting mucoid discharge from the urethra. He placed himself under the care of several physicians of eminence, and notwithstanding patient perseverance under treatment for a considerable length of time, the annoying blennorrhœa continued unaltered.

May 2nd, 1868. He has congenital phymosis, urethral canal only admitting a No. 4 bougie, which reveals a stricture two inches from the orifice, and also at the bulb. The whole urethral canal in a granular condition. No particular spot evincing pain in external prepuce.

Introduced a No. 2 bougie, coated with mucilage, thickly covered with powdered nitrate of silver; allowed it to crystalize, leaving two inches of the point of the bougie free to avoid unnecessary irritation of the bladder; introduced with care to secure proper contact of cantorants in the prostalic portions of the urethra; allowed it to remain ten minutes, when the nitrate of silver had all disappeared; acute pain always followed, with a frequent desire to micturate, the urine being tinged with blood. The pain, which was most intense, as the glans-penis gradually subsided in the course of a few hours. No

rigor or other untoward symptom followed. A free purulent discharge was established on the following day, and expoteation of the mucous membrane occurred on the fifth day after the application of the escharotic. He had slight aching pains in the region of the bladder extending down the thighs, with thick mucoid deposits in his urine,which had alkaloid reaction. This constitution of his urine he remarked, had existed many months before he came under my notice. Strange to say, that after a few days treatment with diluted phosphoric acid and infusion of *Buchu*, the mucoid deposit entirely disappeared.

A fortnight after the curved bougie had been introduced, I performed Ricord's operation for phymosis, with the slight modification of uniting the mucous membrane and skin of the upper half-circle with two sutures, leaving the lower portion free to granulate, and avoid unnecessary contraction at the frænum. This healed very neatly in three weeks, leaving the glans penis quite uncovered, without any unseemly side-flaps. Two weeks more sufficed to cure the intractable blennorrhœa.

Remarks. — Specific inflammation of a mucous membrane, the result of contagion, is always considered a much more serious matter than simple inflammation resulting from an accident. In gonorrhœa, one of the specific class, the mucous lining of the urethra, in the early stage, is of a deep red color; the epithelium having disappeared, it has lost its smooth and shining appearance; and this, in its turn, is followed, as the disease advances, with erosion, ulceration, and granulation, which gradually extends back towards the prostate gland, which seems to be justly considered the seat of blennorrhœa.

A granulated condition of a canal, such as the urethra or cervix uteri, necessarily requires direct application of suitable cauterants for their healthy restoration. It is simply futile to suppose that medicine can ever affect a cure in such cases, without proper local trertment. A granular condition of the urethra may very properly be compared with the same condi-

tion of the eyelids, which are speedily brought under control with gentle cauterization.

We therefore feel warranted in urging urethral cauterization, as a safe and speedy remedy in all cases of obstinate chronic gleet.

CORRESPONDENCE.

PHILADELPHIA, *July* 14, 1868.

To the Editor of the Chicago Medical Journal:

CASE 1.—J. W.; age 59. For seventeen years has been totally blind in both eyes, having a hard cataract. Was brought to the clinic, where Dr. Lewis operated, by displacing the lens. The operation was eminently successful. The patient did well, and yesterday I saw him,—five weeks after the operation,—and he could read distinctly, seeing as well from one eye as from the other.

CASE 2.—Mary O. S.; age 41. Twelve years ago had a distressing labor of two days. "The forceps were applied several times. After two days the child's head was extracted, dead. It was "mashed in on both sides," and otherwise distorted. Examination *per vagina*, now shows uterus hypertrophied. The uterus and the bladder both lie in the mouth of the vagina. Uterus presses heavily on the bladder, which is below the symphysis, and between the rami. Incontinence of urine. Several minute vascular tumors of the urethra present. A colpeurynter was introduced, which gave her but little pain, but prevented her from making water. It was removed five hours after introduction, to enable her to urinate, but was immediately re-introduced; was obliged to repeat the operation every two hours in order to pass her water. For one week the patient used the instrument faithfully, and the symptoms of incontinence of urine disappeared. Before its use, was obliged to pass her water nearly every five minutes.

The colpeurynter gives her but little pain. After wearing this instrument seven weeks, it was observed that it only did good while in use, and at the end of this time, whenever it was removed, the symptoms all reappeared with no diminiution in severity. Chloroform was accordingly administered, and the old cicatrices of the ruptured perineum were nicely trimmed and freshened with the scissors, and the edges then brought together with quilled sutures. A curious feature presented itself during the operation. At the time of the commencement of the inhalation of the chloroform, the colpeurynter was in the vagina. At the first clip of the scissors she experienced some pain, and evidently, in her semiconscious state, imagined she was in labor, and at once *commenced to bear down with all her force.* At about the usual intervals of labor pains, and coming on at regular intervals, she would bear down, pressing outward the colpeurynter, which she evidently supposed to be the *child's head.* As soon as this was *born*, she evidently seemed to experience very much relief, and in a few moments commenced to be excessively hysterical, laughing, sobbing and crying out at short intervals. Soon after the operation, the colpeurynter was again introduced, and the patient given ¼ gr. *Murph. Sulph.* The following day, although there had been some little infiltration of urine, still she was comfortable and doing well. Gave Dover's powder. On the ninth day all dressings were removed. The parts had united nicely, and the difficulty in urination had entirely subsided, and the patient was discharged *cured.*

E. R. Hutchins, M.D.

EDITORIAL.

"The Western Tripod of Medicine."

UNDER this caption the *Leavenworth Medical Herald* bewails the unhappy results of the low fees of the Medical Colleges in Cincinnati and Chicago, as contrasted with the high fees, nominally, charged in St. Louis. The amiable writer is evidently sincere in his opinions, but he must pardon us for saying, "he has got hold of his pitcher by the wrong handle."

All his article is based upon two assumptions, neither of which (he must excuse us for saying), is supported by the facts.

The first assumption is contained in the following paragraphs:

"We have hitherto confined our remarks in great measure to the low standard of the doctorate in our country, and the utter absence of that uniform grade of acquirement, which should be universally and peremptorily demanded as the just equivalent of a most honorable distinction. Though the great mass of the medical profession, appreciating the debased level to which the shallow flooding by the colleges must reduce their noble calling, have been actively agitating the question of a wholesome reform, yet the professional ambition and the collegiate rivalry have resulted in the unnecessary multiplication of schools, and in some instances, in an unworthy and almost commercial strife for patronage.

As though it were not bad enough, however, to open the portals of a most intricate and profound science to whomever may present himself with the nummulary password, regardless of any intrinsic adaptation to, or acquired fitness for, the exalted position to which he aspires, some of our western schools, by reducing the feeble barrier erected by a reasonable monetary requirement, have almost obliterated the last obstacle to a universal flooding of the ranks medical; and have made the creation of a modern doctor of medicine but the question of some fifteen months of time, with the expenditure of about one hundred dollars in money."

To which, the present writer, as one who has been connected with Medical Colleges nearly the entire time for the last quarter of a century, respectfully replies, that the mere fact of the presence or absence of fees has no logical or practical relation to the character of the lectures in either of the colleges alluded to, or in any other college he has ever

known. The matter of high or low fees has no logical or practical relation to the standard of qualifications required for the doctorate here or elsewhere.

It is a novel idea that increasing the opportunities of young men to acquire professional or any other knowledge, is in the nature of things an encouragement for ignorance. If so, our magnificent system of primary schools, academies and colleges in this country had better be abandoned at once. As a matter of history, low as may be the *status* of the profession at the present time, it has wonderfully improved since the introduction of medical colleges in the North-west. The colleges may not have brought up the profession to the high point of attainment deemed practicable by some enthusiastic optimists, but they have accomplished a great work already, and are steadily advancing its best interests.

We will not speak for Rush College for obvious reasons, but let its 1,200 alumni speak for it if needed—as it is not. But we will vouch for Cincinnati, with whose teachers Chicago has none but the most amicable competition, that it affords as good lectures, and turns out as well qualified graduates as any school in the Union, with double or triple its fees.

The second assumption is (by necessary inference), that the low fees charged by the colleges in this city and Cincinnati are the result of their mutual competition, and it is intimated that both parties are ashamed of it, and each disclaims the responsibility. Although not one of the "distinguished" gentlemen to whom the *Herald* refers, we can satisfy its anxiety for information by informing it that neither Chicago nor Cincinnati are responsible. The *Marplot* in the fee business was the (now moribund) Medical Department of the University of Michigan at Ann Arbor, which swept out of existence, at once, all fees, except a trivial one for matriculation. No perfection of lectures or clinical advantages could compete with this *enfant terrible*. The names of world-wide celebrities would have counted for nothing with the swarms

that went greedily down to that home of the prophets. They "went for their diplomas and got them."

At that time the "Phantom in Black" (*Lancet*) occupied a chair in the medical college of this city, and he proposed to make that college a *free* school also. Fees every where went tumbling, or if this did not nominally occur, lavish credits were given on the ostensible fees, which amounted to the same thing, or worse. "We speak what we do know."

From the date of its re-organization, in 1859, Rush College has been anxious to restore fees to their former scale. But he knows little of business who believes that any medical college will cut its own throat to accommodate the notions of men who have no practical acquaintance with carrying on successfully an institution of the kind.

As a mere matter of business protection, all the fee-charging schools should have combined to refuse to receive the tickets, or acknowledge the diplomas of the Ann Arbor concern. This was the prime error. Its effect was continued in the absurd refusal of the so-called Teacher's convention at Cincinnati, endorsed (to get rid of it) by the American Association. That convention, perpetrating a mass of balderdash and Utopian vagaries, omitted the only practical thing they could have usefully meddled with. This, again, was the work of the "Phantom," aided by his ineffable shadow and toady in the interest of Ann Arbor.

We shall probably refer to this subject again, although our own private impression is that the best way to build up a medical college, and "elevate the profession" thereby, is to stop chattering about it and go to work. We are instigated to this "by the honorable memories clustering around our institution."

One thing more. Our earnest friend fears that the time is approaching when he shall be obliged to "advocate a trans-Atlantic diploma, as the only true evidence of medical qualification." This, with our experience, is rich. Why, Brother *Herald*, to-day a diploma from any one of the schools you inveigh against, is worth more (little as it may be), as

such *evidence*, than a dozen old world parchments piled one upon another. The graduate of almost any respectable American college will secure successful practice all around him, whilst the trans-Atlantic is *un-learning* that which is but a clog and burden to him.

The Inconveniences of being a Good Fellow.

The sweetest milk of human kindness will sometimes cream with righteous wrath, even though it may not acidulate in expression. All doctors are pre-supposed to be, *ex officio*, good fellows, and their offices appropriate places for other good fellows to congregate. Cigars, meerschaums, politics, gossip and tobacco-spittle pollute their ante-rooms, and even the inner *sanctum* is invaded. If a patient be not actually by the consulting chair, the *good fellow* is supposed to have nothing to do, and he is expected to devote his attention to helping empty-headed idlers to kill *their* time. The *good fellow* is to listen at all times, in genial mood, to tedious and long spun out narrations of imaginary ailments, and take his reward in additional notes to the continuous refrain which sounds his amiable disposition. As he is, of course, of charitable nature, he must attend all the poor in his neighborhood free of charge, whilst those able to pay are neglected, to be seized upon by Dr. Crusty over the way. Or, as usually happens, his own *able* friends will fail to call upon him in paying cases, because he is so kindly disposed, that he is anxious to have even his rival succeed. When Dr. Crusty has secured all the patient's money, and utterly failed to afford relief, the dilapidated carcass and empty pocket-book are straightway to be found in the ante-rooms of the *good fellow*. When Dr. Crusty has a paying case which he fails to relieve, he puts on a smoother face and asks *good fellow* his opinion and what to do. If benefit results, Dr. Crusty pockets the credit and the fee—if the issue is not favorable, the chance for a paid consultation or subsequent charge of the case, is foreclosed by the grave announcement: "I have already had the advice of the *good fellow*."

When a case is treated and the bill at last sent in, it is the last paid, "For, you know, the doctor is a *good fellow*, and won't mind it."

No one goes near *Crusty* for a subscription or any charitable purpose. *Good fellow's* office is always thronged like a town meeting for the benefit of the poor.

By a *good fellow*, herein, is not meant one who, in Yankee parlance, is styled "a *clever fellow*," an easy going, unsophisticated, little more than half witted chap; but a man with a head full of brains and information, which he gives away for the asking to those who either lack the former, or are too lazy to work for the latter. He can not say No! although his friends (?) are all the time robbing him of a capital more valuable than gold. Ten to one, should misfortune overtake him, these creatures will say: "He's a *good fellow*—BUT"—and a shrug and a wink are the sluice gates of a flood of calumny, or, at best, of depreciation.

Young Æsculapian friend—for Heaven's sake don't seek the reputation of being a *good fellow*.

Extra Eight Pages.

Eight pages are added to the present number. The press of valuable original and translated matter is such that we must still beg pardon of correspondents whose articles are delayed in appearance. A large number of papers on *Shoulder Presentations*, we have placed in the hands of a competent friend, who promises us a digest of them, with general practical comments. The article promised on the new process of preserving the *cadaver*, was crowded out of this number, and as it has been generally published in other medical journals, will not be published in this, unless its insertion is especially requested.

Arrearages.

Subscribers who have allowed themselves to get in arrears for the JOURNAL are particularly notified that its business matters have, since January last, been placed in the hands of our thoroughly competent and accurate publisher, who means to conduct every thing in a business way. The editor has

not, and will not write dunning letters. But the publisher has no respect of persons, and proposes to keep harping on the business strings until the JOURNAL secures that ample pecuniary independence it has fairly earned. It is our intention to publish *weekly*, from and after next January, which will necessarily involve a large increase in expenditure. We propose to fortify in season. "Short accounts make long friends." There is not, we repeat, the slightest occasion for those who are dunned to write the editor sharp, smart or lugubrious replies. They only help to fill the waste basket.

The price of the JOURNAL, as has been advertised in every number, is THREE DOLLARS *per annum* in advance—if not paid within six months, FOUR DOLLARS. Any publisher will inform subscribers that the advance payment is worth much more to him than the delayed one, even at the increased price. To encourage in well-doing, however, we propose to those still in arrears to abate the extra dollar on subscription if the account is settled within thirty days from the receipt of this number of the JOURNAL. All mistakes cheerfully rectified.

Peccavimus.

The even tenor of the JOURNAL'S way, and the harmony which should every where prevail in its columns, was broken and jarred in the last number by the introduction of a communication bearing upon medical ethics, politics and civil war. We know nothing (and care less), about the allegations involving individuals therein made. Our pigeon-holes are crammed with papers communicating instances of violations of the "Code," by men high in professional rank, and case after case, either of mistaken diagnosis, or willful fraud, by practitioners whose names are in the odor of medical sanctity, but we forbear assuming this kind of scavenger work. We have no stomach for "policing the camp." The scattered rattle of the rifles of the frightened pickets disturbs the army more than all the batteries of the enemy. Our big guns are aimed at IGNORANCE, not at individuals, and we propose to fight it out on *that* line to the end of our editorial life. If a little wholesome discipline is occasionally needed by *noisy* subalterns or *brigadiers*, the JOURNAL will conduct its own *courts-martial*. Meanwhile, "Dress up on the right!"

Chicago Hotel for Invalids.

Attention is directed to the advertisement of the reorganization of this much needed institution. It will be noticed that patients have full liberty to select their own medical atttendants, provided these are of recognized respectability. With this modification, and the other advantages afforded, we have every confidence that the Hotel for Invalids will soon acquire general popularity with both the profession and the public. From personal knowledge of the intentions of the managers, we are sure that everything will be conducted with scrupulous regard for the proprieties of the code.

FOREIGN NOTES AND EXCERPTA.

M. GUIBORT lately brought before the Medical Society of the Hospital of Paris, a man fifty years old, who had passed seven iron rings over his penis towards the pubes. The result was severe constriction, followed by apparent gangrene. M. Richard attempted in vain to cut the rings with pliers, and a subsequent attempt with a clockmaker's saw was successful in cutting two of the rings after the destruction of six or seven saws. M. Mathien, a skillful surgical intrument maker, by means of the most powerful pincers, saws and pliers succeeded in removing the remaining five. The gangrenous inflammation was arrested, and the organ saved.

In a similar case recorded by Natalis Guillot, a gold wedding ring was used for a similar purpose. In this case the part was plunged in liquid mercury, which dissolved the ring.—*Lancet.*

A CASE of *Ectropia Vesicæ* has been exhibited to the Clinical Society of London. The vagina could be traced and the uterus could be felt through the rectum. The labiæ were fully, but the nymphæ only slightly developed; the pubes cleft, and the abdomen deficient in the middle line from the umbilicus downwards. In this case the bladder was covered with a structure resembling skin, as low as the level of the ureters, and this surface did not cause trouble from its irritability.—*Lancet.*

M. GUBLER, Professor of the Faculty of Medicine of the Hospital Beaujon (Paris), and Vice-President of the Therapeutical Society, in a review of the French Codex, asserts that *Albumen* plays a much more important part in therapeutics than has been hitherto assigned to it. That in relatively large doses it becomes a solvent for substance considered insoluble, and even for those, which, in other proportions coagulate it firmly. Moreover, that the substances thus dissolved lose at the same time some of their chemical properties, and the reactions which they ordinarily occasion are thenceforward prevented.

This fact is susceptible of numerous and various applications in therapeutics. Not only should albumen be prescribed rigorously in every form containing coagulable substances, but if it is desired to produce general or diffused effects, it will often be advantageous to prepare beforehand albuminous solutions of the active principles with the precaution demanded for these delicate preparations. As albumen dissolves iron, it is proposed to administer this metal in a state of minute division. The process might be extended to many metallic preparations, with which albumen might be charged, whenever their general and alterative effects are desired. In solution, in the form of albuminates, iron, manganese, copper, mercury and silver, would exercise no injurious influence upon the *prima via*, would penetrate the circulation more readily, and would present at once, as it were, a first degree of assimilation.

COPAIBA.—M. Gubler states, is a compound of volatile oil and of copahivic acid, which is a resin. The essential oil is eliminated by the lungs, and the resin by the kidneys, hence in the treatment of blenorrhagia, if copaiba, deprived of its essential oil be administered, the efficiency of the drug will not be dimidished, and the patient be relieved from that horrible breath which betrays it.

ABOUT THE ABSORPTION OF MEDICINES.—M. Demarquay remarks that the time included in experiments upon absorption should be divided into four periods. 1st. That occupied by the drug in reaching the absorbent organs. 2d. That by its retention in the blood. 3d. That consumed in its elimination, and—4th (in the case of drugs eliminated by the kidneys). That of its retention in the bladder.

These experiments give only a distant approximation to the period extending between the administration of the drug and its absorption. M. Demarquay confined his experiments to *Iodide of Potassium*, and determined that after having been administered by the mouth, it was eliminated by the kidneys in from nine to fifteen minutes; but this period was not constant, for in some of the experiments the drugs could not be recovered at all. The same dose administered by the rectum exhibits itself in the urine much more constantly in from two to seven minutes. The drug introduced through the mucous surface of the bronchi in antomized water could be detected in the saliva in five to six minutes.

After sixteen injections of the iodide into the bladder, eight times the drug could not be recovered, and in the other eight cases it appeared in the saliva in from thirty five minutes to six hours after the injection.

The salt, when in solution, was absorbed but feebly by the skin, when quite actively where applied in a pomade.

PUERPERAL CONVULSIONS.—Dr. T. C. Osborn, Greensboro, reports in the July number (1868) of the *New Orleans Journal of Medicine*, a case of recovery from "Eclampsia Bimiparturientis," under the use of chloroform, the forceps and morphia hypodermically. "Protests against indiscriminate bleeding," anterior to delivery.

CÆSARIAN SECTION.—D. Warren Brickell, Professor of Obstetrics in the New Orleans School of Medicine, reports in the same journal a successful (to both mother and child) case of this operation, after a labor of ten days' duration, the necessity of which originated in friability of the tissues of uterus and vaginal adhesion, nothing abnormal being observed in the bones. The novelty in the operation was the necessity of closing the uterine incision with sutures (silver wire), which were permitted to remain, and after five months had occasioned no inconvenience. The entire wound healed by first intention.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—AUGUST 15, 1868.—*No.* 16.

BIOLOGICAL SOCIETY--EXPERIMENTAL PHYSIOLOGY.

Report upon the Physiological Action of Bromide of Potassium, established by Experiments upon Animals. By Dr. W. LABORDE, *Paris.*

TRANSLATED EXPRESSLY FOR THIS JOURNAL, BY WALTER HAY, M.D., ASSOCIATE EDITOR.

IN 1864, at the time when the initiative of my regretted preceptor, M. le Dr. Debout had just awakened in France attention to the *Bromide of Potassium*, certain experiments made upon myself with a view to determine the physiological ction of this substance upon man, demonstrated to me that the large doses, extolled by M. le Dr. Puche, physician to L'Hospital du Midi, and by his internes MM. Rames and Huette were far from possessing all the innocence, which they were induced to attribute to them. I resolved thence, in order to determine the physiological and toxic effects of this compound, to submit it to the test of experiment upon animals. I believe that I have obtained upon this subject results which deserve some attention, and which I desire to submit to the appreciation of the society.

I have prepared for the purpose two of my principal experiments, of which I shall make my colleagues the witnesses. I shall thence confine myself for the moment to the deduction from these experiments, and the recording of essential conclusions which are implicitly contained therein.

Exp. 1.—Into a vigorous frog (*Rana Viridis*), I introduced through the interdigital membrane of each paw 15 centigrammes of *Bromide of Potassium* (in all 30 centigrammes). For this purpose I make use of a process which I have already described; that is to say, that after having previously stretched the interdigital membrane I have applied the crystals of *Bromide of Potassium* in their natural state, taking care to pour upon these crystals some drops of water, in order to facilitate their solution and absorption; this is very rapid, moreover, and five minutes after the commencement of the experiment, the effects of the *Bromide* began to manifest themselves. The animal left to itself, executes, in its place, spontaneous and apparently convulsive movements; then the posterior paws remain inert and extended, presenting a certain flaccidity which does not seem any longer to permit the tonic flexion of the limb, which characterizes the normal flexion of the limb when in repose.

If one or the other of these paws is excited either by simply pinching, or by pricking, or by the aid of the electric current, the animal reacts, at first very feebly against these irritants, and soon, that is to say, after a quarter of an hour or twenty minutes, it no longer reacts at all, whatever may be the degree of irritation, which may be carried even to tearing, to crushing, or to section.

The same state of affairs is observed in the anterior members, but at a somewhat more advanced period of the intoxication it is seen to extend itself likewise to the two eyes, for the irritation of the cornea and the sclerotic provokes, only with great difficulty, the closure of the lids.

However, at the very moment when the phenomena of reactional impossibility commence to manifest themselves, the

animal executes, under my observation, certain partial spontaneous movements several times repeated.

The movements of the flank, which at the beginning presented a noticeable acceleration, underwent, soon afterward, a progressive retardation. They ceased completely three-quarters of an hour after the commencement of the experiment. At this moment the collapse is complete, and the animal is in a state of apparent death; every motor or voluntary manifestation is abolished. The frog being now turned over violently upon its back, reacts only by certain fibrillous trembling (*tressaillements fibrillaires*), which are habitually the last manifestations of a frog which is definitely given up to death.

If we now open the chest, we observe that the heart continues to perform its functions rythmically, if not with the normal number of pulsations. These continue, however, although decreasing progressively for nearly two hours.

Exp. II.—In a frog of medium strength, but very lively, we have, as a preliminary step, ligated the artery of the left paw, taking care not to include the nerve in this ligature. We have next placed upon the interdigital membrane of the posterior paw of the right side, 15 centigrammes of the *Bromide of Potassium*, moistening the crystals with some drops of water. Absorption has been rapid since it has been accomplished in less than five minutes; nevertheless the action of the chemical agent is slower than usual in manifesting itself, by reason, probably, of the inferiority of the dose, which, however, has appeared to us sufficient for the subject of the experiment.

The frog, left to itself, manifested already, as we perceive, a certain degree of agitation with evident rigidity of the dorsal columns; it effects some very vigorous leaps, then is only able to move its paws on the spot. Soon the right posterior paw remains relaxed and almost inert, whilst the left paw (protected by the ligature from the action of the *Bromide*), preserves its tonic flexion; but this last does not long delay permitting itself to be placed, like the other, without reaction,

in a state of passive elongation. The animal, nevertheless, performs, at intervals, energetic spontaneous movements.

About twenty minutes have passed since the absorption of the substance. If the extremity of one or the other posterior paws be pinched, the animal at first only reacts very feebly upon one side equally as upon the other. Soon, however, a bistoury may be plunged successively in the two members, in such a manner as to traverse them thoroughly, without producing the least reactional movement neither to the right nor to the left; the same condition exists in the anterior extremities. At the same time, the movement of the flank is perceived to lessen progressively. The animal is prostrated, and yet he originates from time to time voluntarily movements in the whole of his members. If the nerve of the left paw, which is exposed by the side of the litigated artery, be touched, or especially be pinched or pricked, it effects vigorous motor efforts in the limb of that side—the same thing occurs exactly in the paw of the opposite side.

To prevent any possibility of voluntary impulse, we rapidly decapitate the frog. Universal tremors follow this operation. When tranquility is re-established in the trunk of the animal, every species of irritation of the peripheral organs, whatever may be its violence, extorts no reactional response; the denuded nerve, directly excited, continues to provoke muscular contractions.

Moreover, the spinal marrow, touched or irritated in its canal, with a very fine and very sharp stylet, affords at first very distinct evidences of the preservation of its normal excitability, for all the limbs of the animal are simultaneously agitated by violent and jerking movements exactly resembling those of a wooden jumping-jack, when its string is pulled; if the irritation is maintained during a certain period, the limbs remain in a state of tonic, and, as it were, a tetanic contraction; but the phenomenon exhausts itself soon, without the possibility of being reproduced. The normal excitability of the cord hardly exists for a quarter of an hour under these circumstances, and it appears to diminish progressively from

below upwards, that is to say, the excitability of the cords persists a longer time in its superior regions, in which it still gives evidence of its existence after it appears to be completely extinct in the lumbar.

From these experimental facts, which, repeated a great number of times, have given constant results, we are permitted to conclude:

1. That the *Bromide of Potassium*, introduced into the animal organism by the natural physiological channels, exercises a predominant action over the nervous system in general, and more particularly over the *sensori-motors* of the reflex order by implicating simultaneously the central organ of the elaboration of these phenomena, that is to say, the spinal cord, and the peripheral sensitive nervous expansions.

2. That this action is reflected only secondarily upon the organs and the functions of *voluntary motion* (the brain and nervous conductibility and mobility).

3. That muscular contractility appears to be respected by the *Bromide of Potassium*, and the contractility of the heart, in particular, persists after the manifestations which betray the influence of this salt upon the other organs and functions are produced; the heart, in fact, is the *ultimum moriens* in the bromic intoxication; from which it results, that it would have been entirely erroneous to consider the *Bromide of Potassium* as a cardiac poison.

Experimental Studies upon the Physiological Action of Bromide of Potassium. *By* MARTIN DAMOURETTE and PELVET.

The experiments of MM. Martin Damourette and Pelvet have been made upon the frog, the rabbit, and birds (swallows, pigeons and magpies); the phenomena produced have been the same with different animals, but it is upon the rabbit that they can be most easily analyzed. Moreover, the results obtained upon batrachians are those which the authors report in a more detailed manner.

Experiments upon Frogs. The processes employed have been gastric ingestion, application to the extremity of a paw, and injection into the hypodermic cellular, by means of the syringe of Baraz. The injections have been made in three principal regions: in the groin, in the axilla, and in the back, in the flank, and under the sternum. The medium dose resulting frequently, although not constantly, in the death of the animal, were from 3 to 5 centigrammes. Moreover, the authors employed weak doses, followed always by recovery (from 5 to 25 milligrammes), and strong doses invariably fault (from 5 to 10 centigrammes).

A. *Effects of small doses.* The frog becomes quiet; it seems seems to forget to breathe. By the least stimulation it begins to breathe and to jump; then it relapses into the same calm. The duration of the intoxication varies from six to twenty-four hours.

B. *Effects of medium doses.* Pain at the level of the place of injection, trembling in the neighboring muscles, then enfeeblement of motion, and of sensibility in the vicinity at the end of five or ten minutes, and generally at the end of twenty to forty minutes. It is important to distinguish here the effects of imbibition for those produced by absorption. Muscular irritability is extinguished for a few minutes in the muscles of the regions injected, whilst in the more distant muscles, and those upon which absorption only has acted, it persists after the loss of excitability of the nerves and of the cord.

The motor excitability of the nerves survives this sensibility, and that of the cord (contrary to the opinion of M. Laborde and of MM. Eulenbourg and Guttman), persists even when the nerves have lost their properties. Finally the properties of the cord are abolished in their turn.

From the beginning of the intoxication the frog slumbers. The encaphalon, therefore, undergoes the action of the *Bromide* like the rest of the nervous system. The respiratory movements cease ordinarily a little after the voluntary movements, that is to say, from ten to thirty minutes after an

injection into the grain, and from five to fifteen minutes after an injection into the flank or back.

The diminution of the capillary circulation characterized by the retardation of the course of the blood in the vessels of the interdigital membrane is a constant phenomenon; it commences after about five minutes in the interdigital membrane of the injected side, where it attains its greatest intensity, extending itself thence after ten to forty minutes to the membrane of the other side, and throughout the entire capillary network; it precedes the retardation of the cardiac pulsations which supervenes from the instant that the movements become enfeebled, and the respiration arrested.

The heart is the *ultimum moriens;* it has continued to beat many hours after the spinal cord, the nerves and the muscles had ceased to respond to all irritations. MM. Eulenbourg and Guttman were, therefore, wrong in considering the *Bromide of Potassium* as a double poison—of the heart first, and afterwards of the spinal cord.

C. *Effects of strong doses.* The same spmptoms as in the preceding cases, only with more intensity and rapidity. In some cases the cessation of the heart's action supervenes prematurely, (before the loss of the excitability of the nerves and spinal cord, and muscular irritability). Moreover, congestion of the capillary network may be observed replacing the anemia, which was constant with weak and medium doses.

Experiments upon birds and animals.—By the subcutaneous injection into the groin, or axilla, of four grammes in the rabbit, of sixty centigrammes in the pigeon, and of ten centigrammes in the sparrow, we have—

1. Paralysis of sensation and of motion, commencing in the rejected limb, and continuing throughout.

2. Diminution of temperature. At first, of the injected part, and afterward of the whole body. Frequent and even bloody urination.

3. Respiration at first disturbed, only arrested when all the other parts are paralyzed; its suspension appeared to be the

cause of death, and marks its precise moment; it ensues with the rapidity of lightning in birds.

The authors next devote themselves to a detailed analysis of *Bromium* upon each of the systems and organic apparata; and draw therefrom interesting therapeutic deductions. We refer for these to the originals.

NOTE.—Effects somewhat similar to the above are manifested upon the application of *Aqua Ammonia* to the spinal column (cutaneous surface) of *rana viridis*. The application of a few drops of the liquid is followed by vigorous motion on the part of the animal, occasioned, undoubtedly by the pain. These manifestations are succeeded by immediate and complete loss of contractility, both voluntary and reflex, in the posterior extremities, which extends itself gradually upward along the cord, involving, subsequently, the anterior members, which, in the interval, continue to manifest voluntary contractility for several minutes: respiration and circulation failing last of all. TRANSLATOR.

Experimental Physiology—Vaccine and Quinine.

There were presented to the Academy of Sciences (Paris), at a recent meeting, two communications upon two subjects closely allied, for they are both closely allied with the study of the infinitesimal, which is, at this time, pursued with so much ardor—the nature of virus, and the antiseptic properties of certain agents of the Materia Medica.

In a work relating to microzoa and microphytes in the genesis and evolution of diseases, a work whose whose publication we have been compelled to suspend in consequence of the weekly obligations of the *Gazette Médicale*, but which we will still soon resume, we have have shown the tendency of certain minds to attribute to the presence of these microscopic beings in the blood and in the fluids of the organism, the cause and origin of virulent and zymotic affection. This opinion appears even to grow and to be recruited by new adherents, for daily abroad as well as in France, we observe the discovery of animal or vegetable parasites in the pathological products of infectious or contagious diseases.

We may state especially, since the first communication of

which we have spoken refers to vaccine, that the German observers MM. Schurtz, Hallier et Zürn, have found mycrophytes in vaccina pustules. Must we conclude thence that the action of vaccine is due to the presence of parasites, just as, according to the investigations of M. Davaine, Bacteria constitute the virulent agent in carbon? This would not appear to result from the experiments, of which M. Chaveau has communicated the results to the Academy of Science.

The learned physiologist of Lyons has separated by dialysis the different elements which constitute vaccine, and has endeavored to determine, experimentally, which one among them is necessary in order to secure the successful inoculation of the vaccine. He has, therefore, isolated and inoculated separately—1st, the albuminous serosity; 2nd, the white globules; 3rd, the solid, molecular granulations suspended in the serosity.

The two first series of experiments have given negative results; the granulations alone, even when suspended in ten times their volume of water, have produced legitimate vaccine.

M. Cl. Bernard, who was charged with the presentation to the Academy of this work of M. Chauveau, added that it had been established that the virulent agent of other virus resides in the solid granulations.

What is the nature of these granulations? Would the partizans of animated pathology be authorized to recognize in them living germs, eggs or sporules? The question is not yet susceptible of solution, and demands further investigation. However, this may be, and without reference to the animist or mysterious explanation which has been given of the nature of virus, we find always presented to us, three hypotheses. Some, indeed, locate the virulent action, not in one of the elements of the liquid, but in the entire liquid, which has sustained simply isomeric modification; others attribute it to living microscopic organisms, whose presence they have discovered; and lastly, it would result from the paper of M. Chauveau, and from the confirmation which it has received from M. Claude Bernard, that it is in the solid granulations

that the agent of virulence must be sought. Light upon all these points is needed.

The second communication presented to the Academy by M. Pasteur, in behalf of a professor of Bonn, is more nearly related to the order of ideas which we suggested at the commencement. It relates to the antiseptic properties of the *Salts of Quinine*. These properties must be very energetic, a proportion of one twenty thousandth of *Chlorohydrate of Quinine* will suffice to kill kolpodes and all the paramecea of an infusion. On the other hand, the *Quinine* will act upon the white globules of the blood by arresting the motion with which they are endowed, and by diminishing their number. This may be a new mark of analogy between the white globules of the blood and certain animalculæ to which they have been compared. M. Pasteur does not appear to differ widely from the opinion which considers these globules as microzoa, and it must be recognized, if this fact is generally admitted, that it would constitute by no means the least of the conquests which the doctrine of animated pathology may be permitted to hope for.

NOTES AND OBSERVATIONS IN GENERAL PRACTICE.

BY JOHN FORMAN, M.D., EDINBURGH.

Paper III.—Uterine Diseases.

Case 1. *Menorrhagia.* Mrs. G——; aged 23 years; short stature, pale and thin; mother of three children—youngest fifteen months old; catamenia reappeared five months ago. The case came under my care April 5th, 1868, when she stated that she had been under treatment for profuse menorrhagia for upwards of three months without benefit—her excessive catamenia continuing from ten to fourteen days every month, which had reduced her general strength very

considerably, and made her nervous and irritable. She slept badly, had sick headache, and impaired appetite.

A speculum examination revealed both lips of the *os uteri* hypertrophied, gaping, and surrounded with prominent granulations, extending into the cervical canal, which bleed freely when touched. The sound did not detect any polyphoid or other tumor in the uterus, which was exquisitely tender, felt relaxed, and bled freely from the internal wall. The uterus was injected with a weak solution of perchlorlide of iron to check the hæmorrhage. On the following day, a solution of nitrate of silver, two grains to the ounce of water, was injected, the granular portion of the os and cervix uteri painted over with acid, nitrate of mercury, and painted over once a week; the nitrate of silver injection every four days; the vagina daily injected with a solution of alum. She took acetate of lead and opium pills, and a tonic mixture, containing quinine and chloride of iron.

Her menorrhagia ceased, the catemania becoming normal five weeks after the first injection of nitrate of silver, which was repeated four times. The morbid condition of the *os* and *cervix uteri* disappeared shortly afterwards. The acid, nitrate of mercury was applied thereto, when solid nitrate of silver was lightly applied twice a week until cicatrization was completed. The alum solution used daily to cleanse the vagina, and avoid the accumulation of muco-purulent matter. A piece of lint with a tape attached soaked in the same liquid, and introduced into the vagina, to prevent undue irritation of the walls.

Remarks.—This is an example of a numerous class of patients, which are ever and anon coming under the notice of the practitioner of medicine, and I may add that menorrhagia, with or without ulceration of the *os uteri*, combined more or less with leucorrhœa, is one of the most distressing uterine ailments, which assail the gentler sex. Apart from the more serious causes of the ailment, such as cancerous, fibrous and polypoid tumours, we very frequently meet with it arising

from a morbid condition of the uterus and ovaries, which, when properly recognized, are very successfully corrected. The most frequent lesion causing the uterine hæmorrhage, we find it to be an eroded condition of the mucous membrane of the uterus. This may exist, as we have already remarked, with or without a granular state of the *os uteri.*

The cause of this distressing form of menorrhagia may no doubt be sought for in some peculiar state of the general system unfavorable to the proper development of the periodic decidual membrane, and as a natural consequence the mucous membrane of the uterus assumes a disposition very similar to granular inflammation in other parts of the mucoid system. If this view be correct, our general treatment of such cases should be vigorously supported with direct local remedies. What can be more hopeless and discouraging, than to depend solely upon general measures in cases of *os uteri* ulceration, daily experience proves. The same argument is equally strong in the case of erosion in the ulceroid cavity, yet how many patients do we come across, who have been drenched with medicine for months and years, who may ask in despair, Must this miserable state haunt them their life-long existence? Happily, experience urges us to answer in the negative. Where patient local perseverance in judicious local treatment is adopted, in conjunction with general restorative remedies, the physician's effort's will rarely disappoint him in this class of ailments. He will almost invariably be rewarded with the high satisfaction of being the instrument of extinguishing a vast amount of female suffering and misery.

Paper IV.—Os Uteri Ulceration.

Case.—History. Miss G——; aged 30 years; seamstress; tall, spare frame; dark complexion.

March 18, 1868. Patient states that she has suffered pain from leucorrhœa discharge, with accompanying discomforts of heat, scalding, and external excoriation for two years, and has been under treatment nearly all that time, without any benefit

—rather the reverse. She had some liquid painted over the womb, which did not cause her any uneasiness. She has also taken a quantity of medicine. She complains of general weakness, languor, and impaired appetite; feels very nervous, and is easily excited; her catamenial periods are regular, with an augmented overflow, continuing from five to seven days.

Speculum examination reveals considerable hypertrophy and fungoid; ulceration of both lips of the *os uteri; cervix* slightly dilated, and, like the *os*, of a deep, red, angry appearance, bathed in a muco-purulent sensation, streaked with blood. The walls of the vagina are considerably inflamed and tender. The sound does not indicate any abnormality in the uterine cavity.

Treatment.—The uterus injected with two grains of *Nitrate of Silver*, dissolved in half an ounce each of glycerine and water. The *os* and *cervix uteri* freely cauterized with solid *Chloride of Zinc*. The vagina to be injected twice a day with the *Nitrate of Silver* solution already mentioned; also a piece of lint with a piece of tape attached, soaked in the same liquid, and introduced into the vagina after each injection. To take a course of iron with *Bromide of Potassium* in a bitter infusion, and a nutritious diet.

Remarks.—Four applications of the *Chloride of Zinc*, produce healthy granulations of the *os uteri*, which cicatrize eight weeks after the first application. The *Nitrate of Silver* injection and lint plug were used daily during that period, when the vaginal walls assumed their natural aspect, and her general health simultaneously improved—the discontinuance of the irritating discharge from the vagina very materially increasing her general comfort. As a more bracing tonic, *Strychnia* was now substituted for the *Bromide of Potassium*, in conjunction with *Quinine* and *Iron*.

In the treatment of *os uteri* disease, *Caustic Potass.* was for a long time quite a favorite application with some of our leading obstetric practitioners, who frequently used it extravagantly

in hypertrophied *os uteri*. Experience has shown, however carefully this caustic is applied and counteracted, when the desired cauterization has been effected, its rapidly deliquescent nature renders it exceedingly liable to spread over a portion of the vaginal walls, frequently terminating in adhesion of the *os uteri* to one side or the other, and proving a tedious obstacle in subsequent pregnancies. *Chloride of Zinc* is a much more manageable agent, when prepared in suitable sized sticks. It is much less deliquescent, and equally effective in fungoid ulceration, and the reduction of hypertrophied *os uteri*. At the same time it possesses the advantages of producing a sore which heals more kindly.

In simple ulceration, the *Acid, Nitrate of Mercury*, or *Carbolic Acid*, are to be preferred. When properly applied, they do not cauterize deeply, and heal quickly. Lint, soaked in a weak solution of *Nitrate of Silver* or *Carbolic Acid*, and introduced into the vagina after it has been injected with a mild astringent solution, materially adds to the patient's comfort by keeping the irritated sides apart, and at the same time facilitates the reproduction of healthy epithelium.

Paper V.—Leucorrhœa.

Case.—History. Mrs. M——; aged 25 years; spare frame and fair complexion. March 26th, 1868. States that she has been married over two years; has not been pregnant. Prior to her marriage she enjoyed excellent health; had regular catamenias without leucorrhœa. About six months after her marriage, a white discharge appeared and gradually increased in quantity, by and by becoming continuous, causing her great discomfort, scalding, excoriation, etc. When her general health became affected she applied to a physician; had medicines and a vaginal injector prescribed, which she used for some time without benefit.

Speculum shows the *os uteri* to be of normal size and free of abrasion; *cervix* plugged with an albuminous secretion, vagina and labia of a deep red color, excoriated and extremely sen-

sitive; uterine sound, with considerable difficulty; uterus of normal size, but very sensitive; sound coated with albumenial secretion.

TREATMENT.—The day after the cessation of her catamenial period, a small sponge tent was introduced into the *cervix uteri* to dilate it sufficiently to admit a syringe freely, when the uterus and vagina were freely injected with tepid water, and followed with an injection of two grains of *Nitrate of Silver*, dissolved in half an ounce each of glycerine and water. This induced smart uterine pains for about two hours, when it ceased. The vagina was injected daily with tepid water, and a pessary introduced containing two grains of *Oxyde of Zinc*. She was ordered *Quinine* and *Iron* with *Phosphoric Acid* in a bitter infusion. The uterine injection was not repeated, the pessaries were continued for two weeks, when the leucorrhœa discharge was much less. A weak alum solution was now injected daily and continued until the 2nd of May, when she reported herself quite well.

REMARKS.—Independent of uterine tumors, and carcinoma or ulceration of the *os* and *cervix uteri*, we frequently meet with leucorrhœa of a troublesome and distressing nature. This morbid secretion may arise from chronic congestion of the ovaries, or the lining coats of the uterus, or an inflammatory condition of the mucous membrane of the vagina or labia; and in advanced or neglected cases we find congestion giving place to granulations. Causes like these, singly or combined, are of very frequent occurrence. I have already remarked that the uterine cavity was only once injected with *Nitrate of Silver* in this coat, in the belief that the mucous coat was only congested. Where this has advanced to excessive exfoliation and granulation, we invariably have augmented catamenial flow with increased general distress. In such cases it is found necessary to repeat the injections, and, in some instances, to augment their strength, to reduce the granular points, and induce the formation of healthy membrane. From whatever lesion leucorrhœa springs, its

source must be recognized through the medium of the speculum, or sound, which are indispensable guides in our search for the seat of mischief, to enable us to form a correct diagnosis upon which to assure the basis of disease, by clearing away the *debris* before we commence to rear the superstructure of rational treatment. Ignoring or neglecting this, and depending upon general measures alone, is the most forlorn task the obstetric practitioner can encounter.

Paper VI.—Case of Albuminuria, treated with Nitrite of Urea.

History.—Dr. W—— desired me to visit Mrs. ——, in consultation with him on the 2nd of June ult., whose history was as follows:

Mrs. H——; aged 29; carpenter's wife; tall, nervous and cachectic; mother of four children, the youngest 18 months old. She states that fifteen weeks ago she was seized with severe pain in the lower part of her back, and became very ill, when she called a physician, who told her she was suffering from an attack of intermitting fever; and subsequently, that the severe persisting pain in the back was the result of rheumatism. Her feet soon began to swell, which extended to her legs, thighs and body. Her breathing became embarrassed, compelling her to be supported upright in bed. She became so weak that she required to be lifted from side to side in bed. About four weeks after the onset of her illness, an abscess broke over the pained part in the lower region of her back, and discharged a large quantity of matter. It has continued alternately to heal, re-form and discharge, ever since. The swelling in her chest has diminished of late, but her thighs, legs and feet continue the same.

A short time ago her medical attendant brought another physician to see her in consultation. Immediately after this, her husband solicited Dr. W—— to attend her.

SYMPTOMS.—Pulse weak, 85; integument over throat œdematous; lungs normal; heart's action slightly accelerated, otherwise normal; abdomen distended; umbilical region dull on percussion; iliac tympanitis, thighs, legs and feet œdematous, pitting deeply on pressure; circumference of left leg fifteen and a half inches—right one sixteen inches. She sleeps a great deal; does not have headache; tongue clean; appetite impaired; bowels regular; urine scanty, pale and turbid, of strong acid reaction; sp. gr. 10.05, and forms an albuminous mass, with heat and nitric acid; shows an abundance of tube casts; her catamenia has not appeared since her illness began; no pregnant signs. There is an abscess discharging over lower lumbar spine; no carious vertibræ.

TREATMENT.—A piece of India rubber drainage tube was introduced into the immediate vicinity of the abscess, when a large quantity of serum, tinged with blood, flowed. She was ordered wine and a suitable nourishing diet, with the following medicine:

℞.	*Urea Nitrite* .	℈iv.
	Potass. Acetat. .	ʒij.
	" *Bicarb.* .	ʒiv.
	Tinct. Digitalis .	ʒiv.
	Decoct. Uvæ. Ursi .	℥xx.

M. Capt. coch. magna. et ter. in die.

℞. *Elixir. Valer. Ammon. et Quina* ʒij. *bis die sumenda.*

July 4th. Patient's general condition considerably improved; urine more abundant, less cloudy, only slightly acid; sp. gr. as before; increased cloudiness, with heat, moderate coagulation, and nitric acid.

July 9th. Patient able to move without assistance, and sit up with comfort; appetite improved, sleeps well, and expresses herself as much better; pulse stronger and less accelerated; urine clear, neutral, and quite free from albumen; œdema in the extremities much less.

Discontinue Mixture to have *Potass. Bitart.* ʒj. three times a day, with bitter tonics and nourishing regimen.

Remarks.—This a good example of a case of albuminuria resulting from acute nephritis. The most remarkable feature was the entire disappearance of albumen from the urine. In the course of three weeks after treatment with *Nitrite of Urea* was commenced, five grain doses induced slight nausea. After ten days the dose was reduced to three grains, and the *Potass.* withdrawn. When the urine became normal, *Bitartrate of Potass.* was prescribed to redeem the remaining œdema of the lower extremities.

When *Bitartrate of Potass.* can be procured pure, it is certainly one of the best diuretics we possess. In full doses is apt to excite, in some irritable mucoid diathesis, undue action of the alimentary canal. This, in turn, may be regulated with the addition of gallic acid, or some other astringent. The case continues under treatment. Should any novel feature arise, it may be referred to again.

CORRESPONDENCE.

Paris, Ill., *March 23rd*, 1868.

To the Editor of the Chicago Medical Journal:

In looking over your Journal of the 1st of March, 1868, my attention was arrested by the novelty of a short article on page 176, from the pen of W. Anderson, M.D., of Leroy, Ill. The article is short, and as I desire to notice it somewhat in detail, I shall beg leave to introduce it entire before making my comments. Its caption is, *Report of a Case of Instrumental Delivery.*

"January 23rd, 1868, I was called, in consultation with Dr. D., to attend a lady, aged 36, who had given birth

to seven children. Dr. D. informed me that when he was called in, labor had progressed for twelve hours, the membranes being ruptured and the amniotic fluid having escaped. It was a shoulder presentation, with the head in the left acetabulum, the left arm protruding from the vagina and very much swollen, so that the insertion of the hand into the uterus was impossible, while the force of the uterus was so great as to prevent the adjustment of the fœtus by bringing the head into the pelvis. The arm could not be replaced, and we decided amputation unavoidable. After performing which at the shoulder, the feet were brought down with some difficulty, thus saving any further mutilation of the infant, which, however, we knew to be dead before the operation. The knowledge of its death had no influence on our action, and had it been alive, it would have been born alive, in all probability, with one arm. Can some sage practitioner suggest a method of procedure by which such a danger may be avoided?"

Now, Mr. Editor, while I do not claim to be a sage practitioner, I do claim, in behalf of the profession I am trying to represent, that such cases of so-called instrumental delivery ought to be few and far between. Dr. Anderson fails to inform us as to how long the lady had been in labor, or as to how long the waters had been evacuated at the time of the operation. He says Dr. D. told him she had been in labor twelve hours when he was called in, and that the membranes were ruptured. But as to what time elapsed between the evacuation of the waters and the arrival of Dr. D., and from that time to the time of the performance of the notable operation, we are left wholly in the dark. Nor does he give us any clue to the physical condition of the patient, further than to state that the force of the uterus was so great as to prevent an adjustment of the fœtus by bringing the head into the pelvis. We may then, I think, reasonably infer that several hours had elapsed between the evacuation of the waters and the arrival of Dr. Anderson; in which case we are quite sure no intelligent physician of any practical experience whatever would have ever thought of correcting the presentation by bringing down the child's head? What then? Would he have gone to work to replace the arm? I trow not, and why? Because

at that time it was impracticable, and, if practicable, wholly unnecessary. What then? Would he have decided as did Dr. Anderson and Dr. D., that because the uterine contractions were so forcible as to preclude the possibility of the immediate introduction of his hand into the womb. That, therefore, the amputation of the child's arm was unavoidable. With all due respect for Dr. Anderson and Dr. D., we answer No. What then?

This question brings us to the solution of the sage problem propounded by Dr. Anderson—the method of procedure. We think, in the first place, that the intelligent and experienced physician would have taken measures to stop the violent contractions of the uterus referred to by the Doctor. First by the exhibition of a full dose of *Opium* or *Laudanum*, and if it need be, *Antimony;* or if the patient were strong and vigorous, venesection, followed by the *Opium* or *Laudanum*, and nauseating doses of *Antimony;* but, on the contrary, if the patient were feeble and exhausted, the *Opium* alone would have sufficed. After quieting the pains and allowing the patient to rest for some time, he would have put her (or, at least should), under the full influence of *Chloroform*. The preparatory treatment being thus completed, he would have next proceeded—not to amputate the childs arm, Oh no! certainly not—but to have carefully pushed its shoulder up, and slowly and cautiously introduced his hand by the side of the child's arm, using it for a guide into the uterus, and after finding one or both feet, to have brought them slowly down in accordance with the rules so plainly laid down in our standard text-books; after which the labor is to be completed as in any other footling case.

Of course the practitioner is to use proper discretion in the use of the remedies referred to, taking into consideration the peculiar conditions, surroundings, and, as he can ascertain, the idiosyncracies of each individual case, and govern himself accordingly. But it may be asked by Dr. Anderson and perhaps others, why use *Chloroform* after the pains have been stopped, and the patient's system relaxed by other remedies.

To this I would answer—first, for the same reason precisely that the surgeon would use it when he is going to perform what would otherwise be a painful operation. To prevent pain and to avoid the shock that would naturally follow so serious an operation, as turning would be under the circumstances above alluded to. And, secondly, because I have used it with great comfort to my patients and perfect satisfaction to myself in cases similar to the one in question.

I remember having been called upon to consult with a Dr. S., of Linton, Indiana, on the 10th of April, 1861. The case was as follows:

Mrs. Sperry; aged 30; the mother of five children; of medium size and somewhat robust constitution. On arriving, I was informed by Dr. S. that he had been in attendance on her for ten hours, and that the waters had been broken for six hours. It was a shoulder presentation—the head resting in the right iliac fossa, and not in the *acetabulum*, as in the case reported by Dr. Anderson. The left arm extruding through the vagina, the back of the child of course looking towards the abdomen of the mother. Upon making an examination I found, as did Dr. Anderson in his case, that the child's arm was very much swollen, and the uterus perfectly moulded around its body. The soft parts of the mother were dry and hot, and the uterine contractions so forcible as to utterly preclude the idea of the introduction of the hand into the uterus. Upon retiring to consult with the doctor, he informed me that child's arm had made its appearance in the vagina sometime before the breaking of the waters, and to use his own language, "he had put the d—d thing up a dozen times, and at the very next pain it came down again," a result so natural that I at once gave perfect credence to his statements on this point. After occupying himself with these manipulations for some time, the pains became so forcible as to render it impossible for him to *assist* (?) labor in this *way* any longer.

And what next, Mr. Editor, do you suppose he did? Amputate the child's arm? He did not do that either. He gave the poor unfortunate woman a pint of *Ergot Tea* (which,

luckily for her, I think was worthless). And what next? Why, he made gentle traction by the child's arm, as he said, to assist the pains in the delivery. Great God! what a fearful responsibility. After pulling and tugging at the child's arm and drenching the mother with *Ergot Tea* for full five hours, of course it (the child) was dead. The immaculate infant fell a victim to his unpardonable ignorance. I say unpardonable ignorance, for I do not think we ought to use soft terms in speaking of such reprehensible practice—a practice which, had the *Ergot* been of good quality, might have resulted in the rupture of the uterus, and consequently the death of the mother.

Now, Mr. Editor, I am happy to state that Dr. S. is not a graduate of Rush Medical College, but of Brush College. Its precise location I am unable to give. But that Dr. S. is a fair specimen of its alumni, there can be no doubt.

But to return to our case. After patiently hearing the Doctor's statements relative to his treatment of the patient, I suggested that we had better put her under the full influence of *Opium*, with the addition of a little *Antimony*, and let her rest for two or three hours. But at his wits' end, he readily assented, and the suggestion was acted on at once.

In a short time she was free from pain, and at the end of time above specified, I put her under the full influence of *Chloroform*. This being done, Dr. S., as previously agreed upon, proceeded to introduce his great rough hand (which had been amply developed in the college aforesaid), into the womb of the patient, while I kept her under the influence of *Chloroform*, and after some twenty or thirty minutes of fruitless research for the child's feet he gave up in despair, and requested me to exchange places with him, which I did. Upon introducing my hand, I succeeded in finding one of the child's knees, and, hooking my index finger into its flexure, I I slowly and cautiously drew it down according to the rules laid down in our text books, yet not without some considerable trouble, for the operation of turning under the circumstances is a perplexing, and sometimes a difficult one. This being

done, the delivery of course was easily effected, and within two weeks the mother was able to leave her bed.

We have three objects in view, Mr. Editor, in reporting this case. First, that your readers may see the analogy between it and the one reported by Dr. Anderson. Secondly, that they may become acquainted with the different modes by which uninformed medical men punish poor, confiding unoffending women, and by which they literally slaughter helpless and innocent children. And thirdly, to impress upon their minds the necessity of properly informing themselves that they may thereby avoid such reprehensible practice.

I am aware, Mr. Editor, that this is plain dealing, perhaps rather harsh. But, Sir, ought we not to cry aloud and spare not, while such practice is rife in our land? Are we, I say, for fear of wounding the feelings of our erring brethren, to let such practice go unrebuked, and especially so when the rules for avoiding it are so few, so plain, and so easy of access by every medical man? It is possible that a necessity for evisceration may occur in these cases; but that it is necessary under any circumstances, to amputate the child's arm, we think not.

A. J. MILLER, M.D.

FOREIGN CORRESPONDENCE.

BERLIN, *June 29th*, 1868.

To the Editor of the Chicago Medical Journal:

DEAR SIR,—Since my last from Vienna, I have continued on my tour through Prague and Leipsic to Berlin, and can not refrain from mentioning to you a few of the many objects of scientific worth I was fortunate enough to meet with. Among many men of reputation, I had the pleasure of an introduction to Prof. Henry, of Vienna, and Prof. Ludwig, of Leipsic. Both gentlemen are physiologists of rank, and have constructed apparatuses for injection; rendering the delicate

operation of filling fine capillaries easy, and practicable for all. As long as this was performed by the hand and syringe, it was very difficult to obtain good specimens; for, unless particularly skillful, (as, for instance, Prof. Thiersch, of Leipsic), the pressure was not constant, now stronger, now weaker, when too strong, causing extravasation; when too weak, plugging the beginning of the capillary. The two physiologists above mentioned, experiencing the necessity of something more reliable than the untutored hand, constructed apparatuses by means of which fluids are propelled through the vessels by the constant pressure of a column of mercury of a determined height. The credit of the discovery belongs to to Ludwig; that of the best improvement to Hering. The apparatus of the former has this disadvantage—that, at the time of filling in the injecting mass, the mercury must be evacuated, and thus a considerable quantity of this expensive fluid is lost. Prof. Hering has arranged, by a number of globes and tubes, to make repeated use of the same column of mercury, not a particle being wasted. The apparatus, though apparently complicated, is very simple and ingenious. Both gentlemen, with the characteristic kindness of *German Professors*, allowed us to make use of their apparatus under their guidance.

There is an animated controversy amongst German oculists in regard to the superiority of the extracting of cataracts by section through the *cornea* or the *sclerotic*. Prof. Hasner, of Prague is the strongest advocate for the corneal wound; Prof. Knapp one of the vindicators of the scleral. As, in the course of our trip, we stopped at Prague, the two gentlemen met and concluded to operate according to their several opinions in order to discuss the subject, and, if possible, throw some light upon it. Prof. Knapp performed the operation with his accustomed skill, the cataract-knife of Von Graefe being used; the lens was delivered with ease by simultaneous pressure on the posterior lip of the wound with one spoon, and on the lower part of the corner with another. Prof. Hasner, who, until then had denied the possibility of making a linear wound,

acknowledged this one to be perfectly so, there being no height of flap. The Professor had operated on a case previously by the usual flap operation, and, according to his method, performed the puncture of the hyaloïdea after the escape of the lens. Both patients could distinguish objects after the operations, so that by this operative demonstration nothing was gained, but the possibility of exact execution of both methods; which, of the two, merits our preference, can only be deduced from ultimate statistical results. Most German oculists have abandoned the flap operation for the new method, and all who have tried the latter on a larger scale, so as to acquire skill in performing it, are enthusiastic in its praise, asserting that the results are decidedly better than those of any other method. The puncture of the hyaloid membrane, as performed by Prof. Hasner, causes a small portion of the vitreous to flow into the anterior chamber, and constitutes his modification of the flap operation. According to his views, it has the advantage of removing remaining portions of the lens and capsule from the centre of the pupil. He claims to obtain a much clearer pupillary field than if remnants of the lens and capsule were allowed to remain. In the operation above mentioned, the vitreous filled the anterior chamber after the puncture had been made, the iris thus becoming removed from the cornea, and the pupillary field becoming clear. No vitreous escaped from the corneal wound. Prof. Hasner then showed us a number of cases which had been operated according to his method. In two, the pupils were as clear as if the capsule had been extracted with the lens. On further examination, we found some patients with coloboma of the iris, consequent to prolapsus iridis after the operation; in others, pupillary membranes, more or less dense (pseudoplastic membranes from iritis) were present; and, in one case, suppurative iritis threatened to destroy the eye entirely. These accidents can not be ascribed to the puncture of the hyaloïdea, since they are consequences of the flap operation, not at all rare when the vitreous is left untouched. On the other hand, such perfect clearness of the pupil as we saw in the two cases first mentioned,

is only exceptionally met with when the puncture is not made. What would be the result of a combination of Hasner's method of puncture of the hyaloïdea with the modified linear operation, as performed by A. von Graefe?

And now, before leaving the subject of Opthalmology, I must not forget Stellwag von Carion. He showed us a number of specimens, the most remarkable of which was a fungoid growth in the conjunctiva of a boy. After having been cauterized by another physician, this growth, primarily orbital, soon perforated the globe, and became intraocular. Prof. Stellwag recovered a portion of the orbital tumor. The remainder shrunk, and at the expiration of three years, there had been no recidive. Under the microscope the growth proved to be a granulation tumor. It shows how luxuriant granulations may stimulate a character of malignancy by undue irritative treatment.

Stellwag lays particular stress on the fact, that in the great majority of cases, convergent strabismus is due to hypermetropia, and says that the operation is ineffectual very often when convex glasses are not applied afterward, asserting that the squint will disappear, if this error of refraction be corrected by suitable convex glasses. The resort to these glasses he prefers deferring to the fifth year, and considers it inadequate after puberty. In the latter case, he first operates and then makes use of glasses, to insure the permanency of the result. The ophthalmologists of Germany prefer the latter method in all cases, both before and after puberty, and although he is supported in his views (Donders), it still remains a problem whether they will become generally accepted or not.

In his wards we were also fortunate enough to see a number of cases of soft cataract, in which he had performed a modified flap operation instead of the usual discission. It consists in making a short flap and small wound about one line anterior to the margin of the cornea, and thus extracting the nucleus of the opaque lens, whilst the soft, cortical substance is permitted to peel off. The greater portion can be evacuated afterward, and the remainder is dissolved in the

aqueous humor. He has not operated a sufficient number of cases to assert that it is preferable to the methods in use, but claims to have obtained favorable results. This procedure is no new one. It is the method of the so-called linear extraction, performed in England some years ago by Gibbon, Critchett and others; afterward in Germany by Von Graefe, and a number of German opthalmologists. The only difference is in the instrument employed—Stellwag making his incision with an ordinary cataract-knife, instead of the lance-knife. The indications, every manipulation during the operation, and the after-treatment, are identical. The operation, however, is not commendable, as the danger of anterior synechiæ, and its consequences (Glaucoma), is certainly increased, and, in many instances, must inevitably follow. This method has been almost completely abandoned in favor of discission, or extraction through the scleral border.

In Vienna, we took a high interest in the clinical and pathological anatomical demonstrations which Prof. Politzer, (one of the most renowned authorities in aural surgery), was kind enough to make during a whole week. His ingenious method of driving air into the tympanic cavity through the eustachian tube during the act of deglutition, I need only mention here, as it is well known throughout the medical world. On a large number of patients we were witnesses of its practical utility in furthering diagnosis, and as a therapeutic agent. Another excellent method of investigation, introduced by him, consists in determining the cause of deafness by means of a tuning-fork placed upon the middle of the cranium. Some patients, when subjected to this proceeding, affirm that they distinguish the sound better with the deaf ear; others, on the contrary, with the unaffected ear. According to Prof. Politzer, this is due to obstructions in the tympanic cavity and the external meatus, and to thickening of the tympanum itself; in this manner, the expansion of the undulations of sound to the air being more or less interrupted. When the tuning-fork is placed on the middle line of the cranium, the undulations are conducted through the cranial bones to the labyrinth, and

by the fenestra rotunda, and, perhaps, ovalis, to the tympanic cavity, the tympanum, external meatus, and air. If the tympanum be thickened, or if there be an obstacle in the cavity of the tympanum, or meatus auditorius externus, the undulations of sounds are transmitted to the air only in part, whilst in part they are reflected on the fenestra and bony walls of the labyrinth. This is confirmed by an artificial ear constructed by the Professor. The tympanic cavity, the ossicles, tympanum, external meatus, and the beginning of the labyrinth, are represented in it, and he varies the effect by means of a diaphragm (for the pathological thickening of the external parts of the ear), which he introduces into the meatus auditorius externus. I dwelt rather long on this subject because it is new, and highly important in the diagnosis of the cause of deafness, whether it lies in the labyrinth itself or external to it.

Prof. Politzer, among many other interesting pathological specimens, also kindly demonstrated diseases of the tympanum, different kinds of inflammatory products within the tympanic cavity, caries and purulent destruction of the bony parts of the organ of hearing, and their sad consequences; suppurative meningitis and thrombus of the cranial sinuses.

It would lead me too far to describe these specimens in detail, and I should owe your readers an apology for the minuteness with which I have entered into the above description, were it not that the interest and novelty of this method of diagnosticating diseases of the ear bears the excuse in itself.

Yours, truly,

SAM'L COLE, M.D.

FOUGERA'S COD-LIVER OIL.

DURING the past autumn and winter, a trial was made at the out-door department of Bellevue Hospital of the Iodinized Cod-Liver Oil, prepared by Mr. Fougera, of William street, with the view to ascertain whether or not this oil possessed any advantages over the ordinary uncombined cod-liver oils.

Before giving the results it is fair to say that no other kind of practice presents so few facilities for forming a decided opinion of the merits and efficacy of any medicine, as that of a dispensary. In a hospital the physician has the assurance that his directions in regard to the administration of the medicine will be faithfully carried out, and has moreover generally an opportunity of observing the result. In private practice also he has this latter advantage, though not always the former. In a dispensary practice he has neither. The medicine may or may not be properly administered. If the patient recovers, he generally thinks it unnecessary to come back to report his cure: if he thinks he is not improving, he will probably change to some other dispensary, and the case is lost. An opinion must be formed from the few cases that continue under treatment throughout the case, or by observing whether the patient had improved from visit to visit, though the cure was yet incomplete. The advantages claimed for Mr. Fougera's cod-liver oil, are that by reason of the addition of iodine, bromine, and phosphorus, it is more efficacious, and at the same time the stomach need not be disordered by an excessive amount of oil administered. This oil was given to about eighty patients, about thirty of whom were children, the remainder belonging chiefly to the department of chest diseases. Owing to the difficulties above mentioned, no statistical account of the result can be given; but the opinion of the physicians using it is nearly unanimous to this effect: that the oil is of decided medicinal value; that compared with ordinary cod-liver oil, it appears to take effect more rapidly; and that it obviates the very common necessity of adding extemporaneously to the oil, medicines containing iodine or iron, particularly the syrup of iodide of iron. In private practice, where the price of the article used is not of much importance, it would be worth while to give this preparation a trial.—*Medical Gazette.*

Bromide of Ammonium in Delirium Tremens.—Dr. J. B. FARES, of Romeo, Mich., says:

"I have recently had a case of delirium tremens which yielded promptly to the use of *Bromide of Ammonium*, in ten grain doses, every two hours. Quiet sleep secured after second dose, and calm sleep within twenty-four of the commencing dose. Patient had had two previous attacks within the past two years, neither of which yielded within seven or eight days. I have seen the *Bromide of Potassium* recommended in the difficulty, but believe the *Ammonium* (therapeutically considered) far superior to the *Potassium*, on account of the mild stimulant afforded by the *Ammonia*."

EDITORIAL.

News and Gossip.

Among the recently announced deaths from sun-stroke, is that of W. T. G. MORTON, the practical originator of anæsthesia for surgical purposes. Among those from chloroform is that of Gen. CHARLES G. HALPINE (*"Miles O'Reilly."*) An absurd and cruel rumor is going round the press that the chloroform was taken with suicidal intent. We are assured, by reliable authority, that this statement is entirely unfounded. Meanwhile the practice of mitigating the suffering of neuralgia by inhaling this dangerous fluid, is becoming alarmingly frequent. Popular attention should be directed to its danger.——A correspondent wishes to know what kind of *Pessary* we prefer in our practice. We decline to answer—let each be fully persuaded in his own mind. In a tolerable experience of over twenty years, we have never recommended any kind, but what we regretted it.——The Board of Regents in Michigan have on their hands an infinitesimal elephant, and no place to put him. One Charles J. Hempel has been appointed Professor of the Principles and Practice of Homœopathy in the Medical Department of the University, but the late decision of the Supreme Court leaves him without a platform to spout upon, and only the poor privilege of signing the medical diplomas. What *will* they do with him?——The Trustees of the *Illinois Hospital for the Insane*, at Jacksonville, have issued a pamphlet which thoroughly demolishes the crazy agitators who have so earnestly attacked its management. The public notions on the subject of sanity and insanity are exceedingly vague, and evidently need "reconstruction."——Chancellor Shackleford has decided that the appointment of Drs. Maddin, Callender, Nichol, Buchanan, Van S. Lindsey, and H. M. Compton to the chairs in the Medical College

at Nashville "was unauthorized and void;" that Drs. Jennings, Eve, and Jones are entitled to fill the several chairs in the college to which they have been respectively appointed. ——Professors Bartholow and Blackman, of Cincinnati, are having a heated controversy.——The *Cincinnati Repertory* is out in favor of free medical education. We expect in its next number it will "go in" for free medical attendance upon the sick. Each of these would be excellent, provided the butchers, grocers, *et alii*, would act likewise.——The *British Medical Journal* recommends in suspension of confirmed opium eating, large doses of *Phosphoric Acid* and *Lupulin*. Subsequently *Zinc*, *Iron* and *Quinine*.——A "good article" of sparkling champagne is now made from petroleum. ——It is stated that the venerable N. D. STEBBINS, M.D., of Detroit, is proposed by his friends for the chair of "Institutes of Medicine," in either the Ann Arbor or Detroit Colleges. It is urged that he is far in advance of the former, whilst he would act as a conservative force upon the Young America energy of the latter. From our knowledge of this excellently preserved specimen of the olden time, and our innate horror of the so-called Progress of these modern days, we cordially second his nomination. Liebig and Farraday; Claude Bernard and Virchow, Chambers and Flint, Agassiz, and all that *profanum vulgus* are "very tolerable and not to be endured." Let us go back to "first principles."——The Medical Department of Bowdoin College is to be removed from Brunswick to Portland.——Dr. Jacob Bigelow, of Boston, says that he has not been obliged to occupy his house or stay at home on account of any indisposition or malady whatever for the last half century. He attributes this exemption from disease to temperance, hard work, and ABSTINENCE FROM MEDICINE.

Periodicals Announced.

Half Year Compendium of Medical Science.—The July (second) number of this valuable synopsis of professional literature is now in press. $3.00 *per annum*. Subscribers will address Dr. S. W. Butler, 115 South Seventh street, Philadelphia.

Monthly Medical Reprint.—John Hillyer, 14 South William street, New York, proposes the publication of a monthly reprint of articles from the English, French and German medical press. $5.00 *per annum*.

London Lancet.—The English publishers announce a colonial and foreign edition of their weekly issue in their paper, unabridged, containing even

the local advertisements. $12.00 *per annum* (currency). Copyrighted articles by American writers are to be introduced. The object of this, of course, is to "kill off" the excellent and cheap (abridged) reprint by Wm. C. Herald, 32 Beekman street, New York, published at $5.00 *per annum*. Similar tactics were employed a number of years ago by the publishers of "Blackwood," and, if we remember rightly, succeeded in compelling the American republishers to divide the profits with them. We scarcely think that the foreign issue will achieve a success

College Courant—Yale.—Those of our friends wishing to keep up their acquaintance with college affairs—to revive old associations, and know of the whereabouts of old friends, will find about every thing necessary in this well conducted paper. Beyond this, it contains a large amount of entertaining and instructive reading, from some of the best writers in the country. It has recently been enlarged and improved. $4.00 *per annum*. Address—COLLEGE COURANT, New Haven, Conn.

Clippings from Correspondence.

Position in treatment of Sore Nipples.—A. S. V. MANSFELDE, M.D., of this city, in a communication to us upon this subject, says:

"It will be noticed that the ulcers caused by the pressure of the gums or teeth of the infant, cover not one-half at once, but the two opposite quarters of the nipple of each mammæ; that is owing to the '*position*' of the child while nursing. It lays in the arms of the mother, and is changed from the right to the left, while nursing upon the left or right breast. The infant, as you know, reposes upon the right side, when using the left pap. mam. Now, what I do and with the best result, is, simply directing the nurse to keep the child upon the same side when using the right breast. To accomplish this, I order a chair to be placed by the right side of the mother, covered with a pillow, high enough to reach to the nipple. Upon this the infant is placed, and nursing now, it will touch with its semi-circle of teeth or gums, the opposite two quarters of the nipple, thus giving chance for the remaining parts to heal. But changed in time none of them will ever get diseased, being cared for additionally as directed by authors upon this subject. Consequently our mothers will no longer suffer such agonizing pain, and the doctor will no longer be troubled with the cure of '*sore nipples.*'"

Pernicious Effects of the Bromide of Potassium.—Dr. N. TEAL, of Kendallville, Indiana, says:

"In your issue of July 1st inst., you ask for observations upon the '*pernicious* effects of the too long continued and excessive use of *Bromide of Potossium*,' and in compliance I beg leave to submit a single case:

"Mrs. ——, aged 70, was put upon—

℞. *Bromide of Potassium* . . . . ʒ j.
Aq. Dist. . . . . . ʒ j.

M. S. One-half teaspoonful every six to eight hours daily.

"The above was continued for two weeks when the tongue, which had been much furred for several months previous, suddenly cleaned off and became quite sore. On examination I found the fauces and sides and roof of the mouth red and tender. Water taken into the mouth, if cold, gave pain, and when drank it 'hurt the stomach.' There was tenesmus and a smarting sensation after voiding the fæces. Judging from what I could see and hear of this case, I concluded the whole alimentary canal was more or less irritated, as I believe, from the continued use of the *Bromide*. Saw my patient a few days after she began to complain from the soreness of her mouth and tongue; discontinued the use of the *Bromide*, ordered emolient drinks, astringent gargles, etc. In a day or two the mouth and tongue were healed, and all went on well."

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—SEPTEMBER 1, 1868.—*No.* 17.

PATHOGENESIS.

The Pathological Anatomy and Pathogenesis of Disseminated Chronic Pneumonia, and of Pulmonary Tubercles. By H. LEBERT, *Professor of Clinical Medicine of the University of Breslau.*

TRANSLATED BY WALTER HAY, M.D., ASSOCIATE EDITOR CHICAGO MEDICAL JOURNAL.

IN the following pages I shall publish a few of my lessons upon chronic pneumonia and pulmonary tubercles. I should have attempted to give them entire, but that such a work would transcend the limits of an article for a periodical.

It is well known that for a long time the study of the diseases of the respiratory passages has possessed for me an especial attraction. Engaged for quite a long period in the experimental production of inflammatory and tubercular alterations in the lungs, I hope soon to be able to assemble all my experiments in a special work upon this important subject; but I desire at present to give a *resumé* of my anatomical and pathogenetic experiments upon this subject, seeing that, at this moment, it occupies the attention of pathological anatomists as well as of clinical observers, and indeed, that there is no subject of greater importance, since it concerns diseases

which harvest nearly a fifth part of the human race. The thorough investigation of the mode of existence, and of the formation of such maladies, must, sooner or later, result in effecting a diminution of the ravages of this terrible pestilence.

Before commencing the anatomical description, I should say that I avoid throughout this work, as much as possible, the term "phthisis pulmonalis," especially as it preceded the study of tubercle, and as it appears to have survived the unity of tuberculosis. It would indeed be convenient to understand by this term disseminated chronic pneumonia and pneumophymia (?), associated by a strong affinity, although all recent researches protest against their identity. Indeed, true tuberculosed subjects may succumb after an acute or subacute attack, with figures yet athletic, and with still a sub-cutaneous layer of fat. On the other hand, disseminated chronic pneumonia, in its mild and slightly febrile form, often permits its subjects, who have already cavities in their lungs, to occupy themselves with their business with a degree of vigor and a rotundity of figure far different from that of phthisis. Moreover, the patients who lose flesh and strength under, during the subacute exacerbations of disseminated pneumonia, recover them considerably, when the progress of the malady is retarded and the fever ceases, and the same subjects again emaciate when new foci of disease develop themselves. Thus a patient may be phthisical to-day, be so no longer in three months, and again be so in six; moreover, do not the subjects of chronic catarrh and bronchial dilatation become emaciated by a prolonged and considerable loss of albuminoid substance? Phthisis is, therefore, a morbid effect, and not a disease.

Another term, also very generally employed, and likewise entirely irrational, is that of the "caseous state." Nothing less resembles cheese, under its relations of structure, chemical composition and exterior aspect than the yellow infiltrations termed "caseous;" I am astonished that physicians, lovers of cheese, should not have long since protested against this term, which the lovers of correct and exact medical nomenclature ought very thoroughly to reprobate. To speak of an

infiltration as gray, yellow, circumscribed or diffuse, gives in truth a much clearer idea of the morbid tissue than to designate it as "cheesy." I avoid, with equal care also, the term scrofulous pneumonia. Scrofula, in the majority of cases, having nothing to do with pneumonia. The foci do not correspond with the limits of the lobules, their existence being just as probable in the interstitial and peribronchial connective tissue as in the alveoli. I prefer, likewise, the term disseminated pneumonia to that of lobular, or broncho-pneumonia.

The preliminary remarks concluded, we proceed to the anatomical descriptions.

I.—Pathological Anatomy.

We shall successively pass in review chronic disseminated pneumonia, originating from mechanical causes; then that developed spontaneously, and then true pulmonary tubercles.

We shall disregard chronic diffused and lobular pneumonia, which we have likewise observed and studied anatomically a sufficient number of times, and which is far from being so rare as some authors assert. However, its anatomical and clinical characteristics may associate it more closely with acute or subacute pneumonia, than with the little disseminated foci, or with tubercles, yet both these conditions may be found combined with diffuse infiltration.

1. *Chronic Disseminated Pneumonia from mechanical causes.*—The physicians who are engaged in the investigation of the subject of pulmonary tubercles, and of all relating to them, have very generally neglected the study of pulmonary inflammations from mechanical causes, because they believed them not to be correlated with tubercle. To-day, since the unity of chronic diseases of the lungs no longer exists, the majority of cases, considered formerly as tuberculous, but of slow progress, are shown to be, in reality, foci of inflammatory origin, the study of an intricate inflammatory process could not fail to be benefitted by comparison with similar foci, having an origin very well understood.

We have referred, in a preceding lecture, to the enormous mortality from maladies of the chest, observed by Peacock, of London, and Lewin, of Berlin, amongst the dressers of stone, especially of hard stones and mill stones. Lewin has recognized sharp and pointed bony particles in the expectoration of these laborers. Although anatomical investigations upon this subject are not numerous, yet Bristowe has discovered, from an observation of Peacock, in one of these lungs a very considerable quantity of cutting particles, sharp and transparent, of those collected in the workshop, composed of quartz and of silica.

We are in possession of very exact investigations of Zunker upon diseases of the lungs, caused by ferruginous particles. He has discovered *Oxyde of Iron* in all portions of the lungs, even in the pleura and bronchial glands, as also in the epithelial cells of the ultimate ramifications of the bronchial tubes, and of the air-cells. Many particles of iron having traversed the cellular parietes had reached the pulmonary tissue, especially in the lobular and fundibular partitions, as well as in the sheaths of the bronchial tubes, the sub-pleural tissue, and thence into the pleura, even traversing the lymphatic vessels. The iron had penetrated, not only into the bronchial glands, but also in those which are found by the side of the trachea. These serous (?) fragments had produced interstitial granulations, callous indurations corresponding to the lobules, like a pneumonia, disseminated, lobular, interstitial and peribronchial. There were, moreover, vomicæ, originating, probably, from bronchial ulcerations, and at the surface of the indurated portions of the partial pleuritic thickening.

Hence it appears that granules of iron, produce, eventually, in the lungs, all the manifestations, all the forms, all the phases of disseminated chronic pneumonia.

Coal-dust is less irritating to the lungs, and when it reaches them in small quantities, it appears even salutary in those occupations where it is used in moderate quantities. This is, however, not the case with workmen in mines of pit-coal, and there has been observed, during a long period, the state of

anæmia, and the impeded and prolonged respiration with which those who have labored for a long time in those mines are so frequently troubled whilst the lungs are healthy, and there is no chronic catarrrh, no trouble supervenes, and even in cases of bronchitis, the vibratile movements in the bronchial tubes for a long time prevents the particles of coal depositing themselves in the cells; a black expectoration accompanies the pulmonary catarrh of the laborer, and Traube has demonstrated that this dust has penetrated into the cellular elements of the expectoration.

But, at a later period these fragments of coal would reach the cells, pass through them, and forment at first, in the pulmonary parenchyma, little striated strains, which, at a later period become thicker, more compact, more confluent. It is only exceptionally that these masses attain to the size of a nut. They are found more frequently in the lower and middle lobes ahan in the upper. Masses are found also in some of the terminal bronchial ramifications, thence by degrees the bronchial glands become infiltrated. Whenever a chronic catarrh, with pulmonary emphysema is established, these alterations, at first very slow in developing themselves, are multiplied, and become more considerable. They terminate by constituting themselves true foci of disseminated chronic pneumonia, on this occasion not resembling the cheese of classic authors, but rather their fuel. These foci tend, at a later period, to a destructive process. It is thus that the carbonaceous cavities are formed, which, however, are far from being frequent, and rarely attain the dimensions of pneumonic cavities; their walls are irregular, sinuous, surrounded with a blackish compact tissue; they are met with as well in the inferior as in the superior lobes, in the centre as at the periphery. It is not unusual to find recent or old pleurisy, in its plastic pseudomembranous form, originating from superficial carbonaceous foci. In rare cases there are found little abscesses in the vicinity of the indurations and the black cavities. It is only under exceptional circumstances that true tubercles are found in these lungs.

The more abundant the silica contained in this carbonaceous dust, the more rapid and invasive will be the progress of these alterations.

2. *Chronic Disseminated Pneumonia without mechanical causes.*—I believe that I do not go too far in saying that the greater portion of the cases regarded as chronic tuberculous affections belong to this disease, with these characteristic alterations.

The most frequent anatomical form is alveolar inflammation, alveolitis. In these cases are found foci, from yellow granulations of very small size, miliary like true tubercles up to larger infiltrations, lobular, more voluminous yet, and confluent. There are found, moreover, peribronchial foci, with very considerable proliferation of cellular connective tissue around a bronchus, which often encloses in its cavity a thick, yellowish, cellular mass, easily detached. Finally, there are formed, more or less, considerable interstitial foci, from the size of a pea up to that of a small almond, composed entirely of the budding out and multiplication of the cells of the connective tissue. To constitute out of these diverse localizations particular species, would be so much the more unreasonable, as they are found combined together in almost every manner; but the proliferation of connective tissue, playing here as important a part as that of the epithelial. I am unwilling to accept the term epithelial pneumonia employed by some authors. The expression involves truth, but too partial to permits its application to all these foci, cellular (*alveolaires*), peribronchial and interstitial. In order to avoid an exclusive interpretation, I should say that true tubercles may be the point of departure of these foci; but this is the exception, not the rule. It is much more frequent to find tubercular granulations, disseminated either around pneumonic foci, or in other parts of the lungs.

I believe it may be established as an invariable rule, that when the two orders of alterations are found together, the oldest and most advanced pneumonic foci have been the primitive affection, and the tuberculous granulations have

been developed there in a consecutive and secondary manner. Very often, also, disseminated chronic pneumonia exists without trace of tubercle.

When these disseminated chronic pneumonias are examined, either in the condition of yellow granulations, or as more extensive circumscribed infiltrations, the microscope gives no satisfactory result. The proliferation of connective tissue, both interstitial and peribronchial, exhibits not elements resembling in all respects those of true tubercle; but these are found, moreover, here and there, under the form of granulations, which would be supposed, at first sight, to be tuberculous, if they were not found involved in the midst of irritation of connective tissue of diffuse interstitial pneumonia. When these foci have for their point of origin the air-cells, groups of cells and the lobules, there are found, especially towards the centre, indistinct, shriveled cells, resembling very closely the elements of tubercle. It is true that in the peripheral layers there are observed cells of pus and epithelium—these last swollen and granular, as I have described them from my former observations, and as they are likewise often encumbered around true tubercular granulations, may be either gray or yellowish. Indeed, it is this fact which has induced me for a long time to suspect the difference between pneumonic foci and true tubercle. I must admit that formerly my investigations upon this subject did not take into consideration sufficiently the formation, the generation of these products. On the other hand, the methods of investigation were too imperfect at that time, and, moreover, I recognized, since 1842, vesicular pneumonia, having previously served in L'Hôpital des Enfants with Messrs. Legendre and Bailly, whose investigations into the subject are justly valued even to-day. It is true, that, like them, I, for a long time, recognized only the acute form of alveolitis. However, in 1851, I presented to the anatomical society the lungs of a dog, into whose jugular vein I had injected mercury, and in which I had been able to determine the development of purulent foci, at once vesicular and lobular.

Without regarding more antiquated opinions, Reinhardt, an equally good pathological anatomist and micrograph, had long since demonstrated that solid, disseminated foci of a tuberculous appearance in the lungs, were of an inflammatory character; still, he did not take sufficient account of true tubercle, whilst Virchow, making use of what was true in the investigations of Reinhardt, separated true tubercles from these disseminated pneumonias, which he designated as caseous or scrofulous. Other distinguished authors have employed themselves upon this subject in France, especially Villemin, Herard and Corme, etc. In Germany, L. Meyer and others; but no one has better described the formation of these inflammatory products of chronic pneumonia than Colberg,* who had admirable methods of investigation. Already, previous to the recent publication of his memoir, I had commenced, with Dr. Nyss, the chief of my laboratory, experiments upon the inoculation of tubercle and other morbid products, and we have together revised my old experiments upon artificial irritation of the respiratory passages. Moreover, after the manner of Colberg, we have injected the majority of the lungs which we wished to examine, and made use of all the modern appliances for microscopic preparations. We have preserved a sufficiently large number in our collection of pathological anatomy in our laboratory, to enable us to supply a demonstration. Indeed, in order to decide difficult and arduous questions, it is necessary to examine, in a fresh state, but also after having been hardened and submitted to different liquids, the thin, injected slices, in order to be able to discover and to distinguish that, which, whether of tubercle or inflammatory product, takes its origin from the capillaries, from the air-cells, from the small bronchi, from the interstitial tissue, etc.

But one should not be intimidated by the length and difficulty of these investigations. After having made them a certain number of times, it is possible to distinguish with the naked eye all the varieties of pulmonary alterations, which

* Deutches Archiv. fur Clinische Medicin. 1866. 2 Band. 4 a 5 Heft, p. 153.

we have already done, up to the present time, in the presence of pupils, whilst practicing autopsies.

The study of acute and subacute vesicular pneumonia, enables us to see the alveoli (air-cells), filled with muco-pus with epithelial and pus cells, more extensive purulent cavities, even to little foci of lobular hepatization, with a granular, yellowish section. In all these conditions, the hyperplastic product of the epithelium, whether alveolar (cellular), or especially bronchial, may become thickened, and solidify itself, so to speak. In disseminated chronic pneumonia, the smaller foci of a dead yellow, may vary from the size of a grain of dust to that of a hemp-seed, and larger, forming thus miliary granulations, but more dead, more yellow, more friable. These yellow granulations may group themselves together and form little infiltrations from the size of a lintel to that of a pea, or larger, yellow with a smooth and dry section, which, generally, from the very smallest, are scattered in a different manner, without clearly defined limits, in the surrounding pulmonary tissue. Already amongst these infiltrations, still small, it is not unusual to find in the centre, a little opening, corresponding to a lobular bronchus. In places, these masses exhibit a grayish color, probably from the remains of the capillaries which have disappeared, very generally the injections penetrated sufficiently far around these little inflammatory foci, without at all reaching into their interior.

In proportion as the granulations and lobular infiltrations are multiplied and become more confluent, infiltrations are developed, more extended, rounded, lobular, exhibiting a superficies like an oak leaf: a condition very well represented in the designs of Messrs. Herard and Cornel. It is not unusual to find around the miliary alveolar deposits, and between the confluent infiltrations a substance of a deep or reddish gray, partially transparent, which, in a more advanced state becomes firmer, more deep, and assumes a callous aspect of a slaty or blackish gray, in consequence of a considerable quantity of pigment. The infiltrated substance of a reddish gray originates often from immature hyperplasia of the interstitial

pulmonary connective issue. It may also exist under the form of little circumscribed masses; most frequently they are found combined with the yellowish foci of cellular (alveolar) origin. We are already familiar with inflammation around the bronchial tubes. More frequently still it is found around the larger bronchial tubes. These peribronchial foci have, at first, a grayish aspect, succulent, and are then composed of the cellular elements of the connective tissue in process of proliferation, and even in the midst of this diffuse inflammation are found some grayish granulations which resemble true tubercles. Later, these buddings of connective tissue become more yellow, drier; the bronchus, surrounded by this tissue, is ordinarily filled with the thickened product of its own secretion easily separable. Hence foci, miliary, lobular, confluent, extended, foci alveolar, peribronchial and interstitial, combined in every manner, but with a predominance of alveolar inflammation, constitute the anatomical elements of disseminated chronic pneumonia.

We have already seen in what manner the interstitial, peribronchial, inflammatory products are formed; as to those of the cells, they are certainly seen at an early period filled with very numerous epithelial cells in process of proliferation, as well as numerous cells of pus, either free or enclosed in the interior of the cells.

This multiplication of epithelia and formation of purulent elements, constitute the anatomical elements of alveolitis, without considering the hyperæmia of the capillary vessels around the alveoli; but the great difficulty is to determine their point of departure. Colberg, who has so well described their genesis, asserts that they originate from the continuous epithelium of the alveoli. It is known that among micrographs some recognize the existence of this alveolar epithelium, whilst others deny it. I have endeavored in vain to detect it in the adult man, even in preparations injected and dried, and in fine sections in various directions. I have seen there only intercapillary cells, such as Villemin and others describe. Now, these cells exist in too small numbers to explain those

so considerable cellular masses. I should, therefore, be much more disposed to believe, as in lobular pneumonia, in the hyperplasia of the epithelium of the ultimate bronchial terminations, budding out, multiplying themselves towards the alveoli, and terminating by filling them. Nevertheless, the question is still undecided, and very difficult to resolve. These epithelial elements form not only islets of alveolar infiltration, but also yellow, miliary granulations. These cells speedily undergo a profound alteration by granular or granulo-fatty infiltration, which render their appearance more opaque, then their interstitial serum is quickly absorbed; which, then, gives to the section an aspect dry, and of a dead yellow (caseous of authors). The capillaries not penetrating them, it is easy to understand the retrograde changes, cellular death, the "necrocythosis" of the inflammatory elements.

The debris of the capillaries form pigmentary granulations and stripes, grayish or darker, are abundant around the foci. Once the shells of the shrivelled alveoli becoming granular the resemblance to yellow tubercle is great, whilst their irregular diffusion in the pulmonary tissue, and their mode of formation render them easily distinguishable from true tubercle. Moreover, alveolitis involves as well the interstitial and peribronchial cellular tissue, whilst, on the other hand, inflammation of the connective tissue is combined with that of the alveolæ. It is not right, therefore, to give to chronic disseminated pneumonia the name of epithelial, a term proposed by several authors, but which would be too exclusive. When the inflammatory foci exist in good numbers, with a good state of the general health, they may gradually disappear completely, or diminish in volume, forming yellowish masses resembling glaziers' putty, or constituting little callous indurations of the cellular tissue, in which a species of stony mortar remains as a residue of the alveolar foci. These diverse conditions are combined in every mode, and are found by preference at the summit of one or both lungs, frequently even with a retraction of a cicatricial appearance on the surface. Sometimes, also, there are found in their neighborhood thick-

ened branchlets, obliterated or filled with the concrete product of their secretion.

It is not unfrequent that epithelial or purulent hyperplasia, exhausts itself speedily in the alveoli; and then it is the connective elements of the neighborhood which furnish the ulterior purulent elements.

The considerable masses of cellular elements described, excite in their turn an irritative process in their neighborhood. All these products tend to disintegration; a species of molecular necrosis progresses step by step, and it is thus that ulcerations are formed, at first small, then more and more voluminous, sometimes confluent. Ulcers known under the name of pulmonary caverns (*vomicæ*), surrounded often by more recent foci, which, in their turn, may undergo the same alteration. These irregular cavities tend to invest themselves with a membrane, which, when it covers them completely, may isolate them, and contribute gradually to their cicatrization; but most frequently the contents of the cavity are muco-purulent, and enclose the detritus of all these tissues in process of decomposition, mingled sometimes with the mycelia of fungi. The branches which open into these caverns are ordinarily ulcerated, and, as it were, cut perpendicularly at their opening, whilst the bronchial dilatations, equally frequent in the summit of lungs attacked by chronic pneumonia, are distinguished by the continuity of the mucous membrane of the branches into the whole of the dilated cavity. It is not unfrequent to see in these cavities larger blood-vessels which traverse them, and whose rupture produced the cavernous hæmorrhage, sometimes speedily fatal. The walls enclose also numerous capillaries, and their hair-like appearance is especially manifest when their cavities are examined with the lens under water. In fortunate cases, the inflammation of the connective tissue forms around the pulmonary ulcer a thick, callous substance, which, by becoming more and more dense, may induce from without inward the retraction and final cicatrization from the cavity. All these ulcers, from the very smallest, may, when they are situated

svperficially, open into the pleura, a perforation known under the title pneumo-thorax, and in rare cases with external perforation through the thoracic walls with pleuro-pulmonary fistula.

(*To be continued.*)

RETROVERSION OF THE PREGNANT WOMB.

BY F. R. MERGLER, M.D., WHEELING, COOK COUNTY, ILL.

PROF. ALLEN,—Having read with interest the paper of our medical brother, Dr. Bogue, published in the *Chicago Medical Journal* for July 15th, concerning that alarming accident of a pregnant woman, termed "*Retroversio Uteri*, I take the liberty to present you for your readers some lines on the same malady, together with a few cases, showing that this displacement can be successfully combated if we try to replace the womb *per rectum* with four fingers, instead of manipulating *per vaginam*, and that *abortus is avoided* in this manner. Lately the *colpeurynter* has been used for replacement of the womb. If we succeed by it, very well; but, if this elegant windbag should fail, too, it may be good to have another resource, which, in my experience, knoweth no failure.

In the year 1850, I had to meet my first case of *retroversio uteri* in a woman gone about three months. The principal trouble for which she applied, was an alarming *ischuria*. After due examination, *per vaginam*, I soon learned the real cause of her complaint, emptied the bladder by aid of the catheter, and then proceeded to restore the displaced uterus, manipulating (according to the teachings of books and professors) within the vaginal canal. But, as often as I pressed my finger against the posterior wall of the vagina, and upward against the impacted uterus, I failed constantly in every effort. Discouraged, I caused counsel to be procured, and although the venerable consiliarus did his best, no replacement was

effected. He had been manipulating in the same manner as I did—*per vaginam*. A few days afterwards, as could be expected, *abortus took place*.

Shortly after this sad disappointment I happened to see Dr. F. Kiwisch von Rotterhaus' recent publication on female diseases. Naturally, with the highest interest and curiosity, I studied his chapter on "*Retroversio Uteri Gravidi*." As soon as I had learned his advice for this accident, I felt at first not a little sorry, because I was now convinced that the above narrated unhappy success in my first case of *retroversio* would not have occurred, if I had sooner been acquainted with the method of Kiwisch. But I could not do any better than to press firmly into my memory his mode of operation, determined to try its merits as soon as occasion was given. I am unable to say whether Kiwisch is the real inventor of this *modus operandi*, but I had never before read any similar advice. It is chiefly this:

1. Empty the bladder with a *male* (not female) catheter. The cervix uteri in this accident being displaced forwards and upwards, presses firmly against the os pubis, and compresses, therefore, the neck of the bladder so strongly, that a real occlusion of it is effected. Hence, a well bent male catheter is more apt to enter the bladder by creeping around the *symphysis osseum pubis* upwards and forwards. A silver catheter may be preferable to an elastic one, and an index finger introduced into the vagina during the introduction of the catheter, should guard the blunt point of the catheter, and help to lead it around the symphysis, otherwise perforation of the neck of the bladder might be effected.

Having first emptied the over-extended bladder, you have removed one obstacle to the return of the womb to its normal place.

II. The next obstacle against the return of the womb in its place is that osseous projection from the sacral bone, known as the *promontorium pelvis*. The body of the womb, having been, by some mechanical cause, bent and forced back and downwards into the hollow of the sacrum, is held there fast

and prevented from re-ascension to its former erect position by the promontory. To overcome this difficulty, manipulation within the vagina is many times insufficient. We are better able to lift the uterus out of its malposition, *if we succeed in bringing the operating fingers between the uterus and sacrum.* Therefore, let the patient take a position on her knees, bending the head and upper part of the body down as far as possible. Lubricate your operating hand very well, and insert the first two fingers of it into the rectum of the patient. You will now detect through the *anterior* wall of the rectum, a roundish, elastic body, projecting below the promontory into the sacral excavation. If your fingers are long enough, you may press them instantly against the uterine body. But you will seldom be able with one or two fingers to complete the operation. You must, therefore, cautiously introduce the other two fingers also, the thumb remaining outside. This dilatation of the sphincter ani with four fingers is the only painful act of the operation, and a somewhat rude proceeding. But is is pretty well practicable, and secures the success.

As soon as you have inserted your hand into the rectum, you should give to it such a turn, that its back looks towards the sacrum. Now, you may commence to press with the tips of your fingers gently against the womb. From one to three forward pushings with your fingers will lift the womb out of its sacral bed, and will induce it to glide readily along the lower side of the promontory forward and return (at most with a kind of joyous jump) back into its former erect position. A digital examination *per vaginam*, will instantly satisfy you that the uterus is now well located again, and the troubles ended.

This is a condensed delineation of the mode of replacement of the retroverted uterus, after Kiwisch, as I have afterwards practiced, and in *none* of the cases where I tried it, was I disappointed any more.

I will therefore, now, to illustrate the result of this mode of operation, report a few cases of *retroversio uteri* which I have

met during my professional life, and which are, as I believe, highly encouraging.

Case I. (1858.) Mrs. V. of Lac Furic, Illinois; wife of a farmer; aged about forty years; of a very lax and feeble constitution; mother already of six children; pregnant again since three months. Sent for me, asking relief from a very troublesome ischuria. Examination proved very soon a case of retroversio of the pregnant uterus, existing about two days. Proceeded to make the replacement after Kiwisch's method, the first time operating *per rectum with the hand.* Operation succeeded satisfactorily.

Case II. Only fourteen days after this reposition of the womb, the same lady returned to my office, complaining as before. Made the replacement again in same manner successfully. No abortus afterwards occurred. No other troubles throughout the whole pregnancy were felt. At the termination of it, she was delivered of a full grown child by the aid of the forceps, which I had to use on account of absence of expulsory contraction of the womb. The child was dead. Mother recovered well, and gave birth afterwards to three other children. Had never again in any of her further pregnancies to complain of *retroversio.* But the two last of her children had each one to be taken from her with forceps. Mrs. V. having had her share now, since then she has enjoyed relatively good health up to the present time.

Case III. (1866.) Mrs. H., of Long Grove, Ill.; wife of a farm laborer; aged about thirty years; mother of several children; generally healthy and hard-working; pregnant for four months. She informed me that just four weeks before this she was attacked severely with ischuria. Her impotence to void her urine, turned after a few days of great suffering, to the other extreme. The urine flowing again could not be retained at all any more. Constantly, a blood-colored urine was dropping away from her, and wherever she was going, sitting or standing, the floor below was soiled with the water. This state of things was yet present, and I was not a little surprised that things had so long their way without medical interference.

The external examination of the poor sufferer's abdomen showed the bladder extended to a tremendous volume, so that it could be easily mistaken for the womb itself in highest pregnancy.

The examination *per vaginam* elucidated unmistakably another case of *retroversio uteri gravidi.* After the necessary explanations, I introduced first the male catheter, and abstracted not less than nearly three-quarters of a pail full of bloody urine of the most penetrant bad odor. After this, the abdomen came instantly down to a shape more adequate to a four months pregnancy. Then I made the reposition of the womb *per anum* with the hand (four fingers), as before described, and had the satisfaction to restore the poor woman in a short time to a normal state again. Re-examination *per vaginam* proved it instantly.

Mrs. H. from this time had no untoward symptom any further. In due and regular time (after five months more), she was delivered of a full grown child, which is alive and well.

Case IV. (1868). The same lady called at my office again about the 4th of July. Was anew pregnant since three months, and for the last two days troubled as once before with inability to void her urine. Examination proved that we had to combat another retroversion of the womb. This I did successfully as in the cases before, and Mrs. H. expects again a safe delivery when her time will come. At least, no abortus has yet occurred.

This is my experience in the line of *retroversio uteri* during a practice of twenty-eight years. If any one of our brethren, in case of emergency, after other methods and even the colpeurynter have failed—would try the above described method of *replacement per anum with the hand,* I feel confident that he will not, as I did, *experience disappointment.* The dilatation of the sphincter ani with the four fingers may be with many a serious objection, but having been compelled, as I was once, to resort to it, it will be found not half so dangerous as expected. Notwithstanding, I wish heartily that this rough proceeding may be spared to our patients, if there is any possibility.

IMPACTED FRACTURE OF THE NECK OF THE FEMUR SIMULATING ILIAC DISLOCATION.

BY JOHN E. OWENS, M.D., SURGEON TO ST. LUKE'S HOSPITAL, CHICAGO.

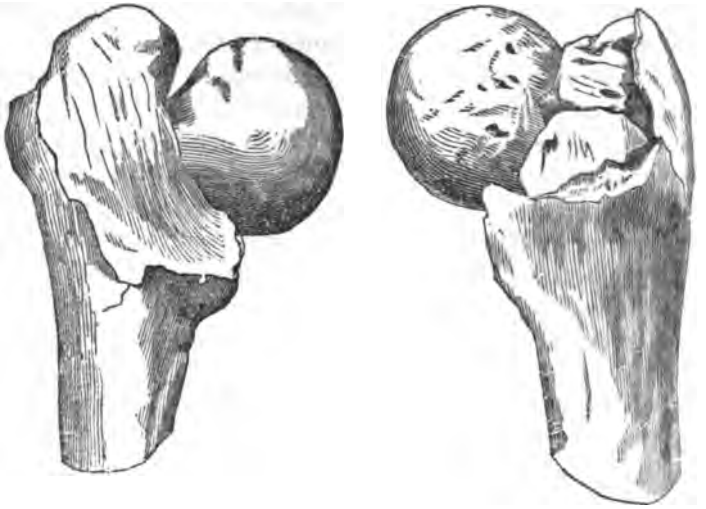
W. B., aged 73, a stone-cutter, was admitted to St. Luke's Hospital, December 24th, 1865. About a week before his admission, the patient, upon entering his room, and, in the dark, groping about for the matches, fell over a chair. Some pain was felt in the hip-joint at the time, but almost immediately he got up, struck a light, and went to bed. The patient did not feel that he was at all injured; but, in consequence of his becoming more and more debilitated, his friends brought him to the hospital. Upon admission he was pale, thin and haggard, appetite almost entirely gone, pulse feeble and rather frequent, and extremities cold. He said that he had no pain—indeed, no uneasiness, but that he only felt weak, and that his appetite was gone. The history of the case was given intelligently, yet his own statement gave no clue to the existence of any affection other than debility. The nurse, however, informed me that his thigh was bruised. The leg was found in the following condition: there was considerable ecchymosis about the groin, and extending over two-thirds of the thigh of the affected side; a comparative fullness of the region of the ant. sup. spine, and the trochanter major; the knee a little above, and somewhat in advance of the sound one; the foot inverted; the great toe directed towards the opposite tarsus; the thigh slightly bent upon the pelvis, and the leg upon the thigh; the limb from one-half to two inches shorter than the sound one. Neither whilst recumbent, nor whilst we held him in an upright position, was crepitation elicited; the limb could be moved pretty freely in all directions, yet movement caused considerable pain about the joint; the arc described by the great trochanter, upon rotating the

affected limb, seemed about equal to that of the other side; extension applied at the knee did not lengthen the limb; the foot was able to be everted, but, when left to itself, returned to the position already described. We diagnosed impacted fracture of the neck of the femur. The leg was placed in a comfortable position upon pillows. In a few days an intractable diarrhœa supervened, and the patient, refusing medicines, nourishment and stimulus, died January 12th, 1866.

It will be readily seen, from the history of this case, what must have been the difficulties encountered in making out the diagnosis. After listening to the lectures upon the various injuries and affections of the hip-joints, or after studying the able articles upon such affections, in some of our works upon surgery, the younger surgeon is pretty apt to come to the conclusion that the differential diagnosis, at least between a fracture and a dislocation, is rather an easy matter. Cases now and then occur, however, which throw many difficulties in the way of diagnosis. The subject of this paper serves to illustrate some of these difficulties. For instance, here is a case, the symptoms of which are almost entirely those of an iliac dislocation, viz.: the fullness about the hip, the position of the knee, the inverted foot; the great-toe pointing towards the opposite tarsus; the want of crepitation, and the non-restoration of the proper length of the limb by extension.

In making up the diagnosis, four facts are taken into consideration: the patient was an old man, the head of the bone was not felt on the dorsal surface of the ilium, as it can be in those subjects in iliac dislocation; the limb could be moved tolerably freely in all directions, and there was a want of crepitation. In old men—men over 65—owing to its comparative brittleness, the neck of the femur will commonly give way before a dislocation is produced; and, indeed, the forces that, in middle life, usually produce dislocations, in old age produce fractures. In an iliac dislocation, the foot, as mentioned above, is firmly fixed in a constrained manner; but there is no reason, except from the consensual avoidance of pain, why this should be the reason in an impacted fracture. Indeed,

in this case, the free motion of the afflicted limb, and the want of crepitation, owing to the firm manner in which the fragments are locked together, were the diagnostic symptoms—and that, too, in spite of the knee and foot assuming a position directly the reverse of that usually attributed to this species of fracture.



We were not able to have an autopsy in the hospital, but one night whilst at work in the dissecting room of one of the colleges, this old man's body was brought in by the resurrectionist. The bone was found in the condition in which the figure represents it, viz.: there are six pieces; the fracture extends through the trochanters; the neck is firmly impacted amongst the surrounding fragments; the upper end of the shaft and one of the larger pieces are somewhat excavated, forming a socket for the broken end of the neck; there was no evidence that the reparative process had commenced amongst the fragments; the pieces were held in excellent position, and any successful efforts to have restored the limb to its normal length and position, would have placed the parts in a position less capable of bony union, than the one in which the autopsy revealed them. It is well known that bony

union has taken place in this variety of fracture, and that, too, in patients older than this one. Occurring usually in old and feeble persons, it is better not to disturb the relative position of the impacted fragments; for a shortened, but firm limb is much better than a fracture. In the examination of these cases, the movements of the leg must be conducted with gentleness, lest the neck be displaced from its impacted position. Extension, especially, must be used very cautiously, and rather with a view to discover if the limb is extensible, than to efface any shortening that may exist. Placing the patient upon a firm and comfortable mattress, and the limb on a double-inclined plane (one of pillows is a good one), and the administration of tonics and the most concentrated nourishment, will give us the best results.

CORRESPONDENCE.

CASE OF PUERPERAL CONVULSIONS—HOMŒOPATHY *vs.* COMMON-SENSE.

Mr. Editor,—Sure that too much light from experience can not be thrown upon so frightful an aberration of the nervous system, as is known under the name of "Puerperal Convulsions," and aware that in the light of such cases, the relative merit of the various "pathies" and common-sense medicine becomes especially evident, I am induced to send to the Journal the following notes.

Mrs. B., a stout young Irish woman, of very full habit, was delivered of her first child on the morning of August 5th, at 4 o'clock. The attending doctor advertises as follows: "*Obstetrics—Specialty.* My patients have always the happy result of short and easy labor, instead of dread and suffering. Mild, pleasant (in homœopathic form) remedies, free. Low fees."

One hour after her delivery, she was seized with a severe

convulsion. These continued, with more or less frequency, until 3 P. M. of the same day. A hygieno-homœopath had been called in consultation. At my visit at 3 P. M., she was being convulsed every fifteen to twenty minutes. No urine had been passed through the day, nor for some hours before her delivery; feet and ankles, and, indeed, her whole person, were œdematous. Her convulsions were very strong, and strangulation was imminent from mucus collecting in the air passages. I found the usual two little cups of water +?, and a little one side one sugar pellet that was being carried off by two voracious flies.

I immediately ordered three drachms of *Bromide of Potassium*, *Morphine*, *Chloroform*, and a lancet. I drew off two ounces of fair colored urine; bled her to three pints; gave in four hours two drachms of the *Bromide*, and kept her under the influence of *Chloroform* for three hours and a half; convulsions were not repeated. This, followed by a little diuretic and aperient, and a comfortable night, found her the next morning completely convalescent.

CONTRAST.

HOMŒOPATHIC SERIES.	COMMON-SENSE SERIES.
Two little solutions of ? One sugar pellet, and two flies carrying it off. Convulsions increasing in force and frequency. Death imminent.	Three pints of blood; two drachms *Bromide of Potassium*; three ounces of Squibb's *Chloroform*. Convulsions ceased. Convalescence commenced.

H. O. HITCHCOCK, M.D.

KALAMAZOO, *August 8th*, 1868.

A CASE OF MONSTROSITY.

NEW MAYSVILLE, *June 25th*, 1868.

PROF. ALLEN—DEAR SIR: Allow me to refer to you a case of monstrosity which fell into my hands not long ago. April 26, 1868, I was summoned to attend Mrs. L., aged 36 years, in her ninth confinement—eight months advanced. She was seized at 7 A.M. with violent pains, which were followed by

the escape of the liquor amnii—nearly half a gallon, according to her statement, came away. The pains ceased to recur until afternoon. I proceeded to make an examination: found the os uteri dilated about the size of a quarter of a dollar, and the membranes pouching through, and could barely touch what I took to be an elbow. I was unable to make out a positive diagnosis, as it would recede from my finger on the slightest touch. After the elapse of several hours, the os was sufficiently dilated so that I ruptured the membrane, and near a quart escaped. I introduced my hand and found that I had a knee, instead of an elbow presented. I succeeded in bringing down the feet, and congratulated myself with the thought that delivery would soon take place; but pain after pain caused but little or no progress. I gave her *Ergot.* The contractions became very active. I made gentle but firm traction, but ineffectually. Her powers began to fail. I thought I was justifiable in a stronger effort, which was made, and I soon discovered I was making some progress. In examining the breach, I could feel no trace of any genital organs, but distinctly felt a tumor on the left hip nearly as large as a pullet's egg, soft and compressible. After delivering the breach, I felt something in or protruding through the vagina, which I first thought to be the placenta, but another firm contraction, and I felt quite a different substance. On examination the first proved to be the liver of the child, the remainder was the abdominal viscera, and that the child was neither male nor female, there being no trace of the genitals or rectum. The abdomen was contracted, and the viscera *developed on the outside*, surrounded by the membrane, which I had previously ruptured. The opening was not partially, but perfectly closed. They were attached by a small place (one-half inch in diameter). Just below the umbilicus and the umbilical cord, or what served its purpose, was a small, flat substance, about one-fourth the normal size, and two and one-third or three inches long, and seemed to unite or be continuous with the membranes covering the intestines. There was some little deformity of the lower extremities, but the

head, thorax, and upper extremities were well developed. I think the shortness of the cord was the cause of the protracted labor, which gave way at the last effort of traction. After delivery, the most frightful hæmorrhage ensued. I introduced my hand and delivered the placenta, and had no farther trouble. Yours, truly,

R. W. LONG, M.D.

To the Editor of the Chicago Medical Journal:

DEAR SIR: Was called, May 16th, to see a son of Mr. Mc., aged 16 years. Found the patient suffering from what is called colic. I learned from him that he had for a considerable time been suffering from an attack of pain about the umbilicus which came on in the afternoon. He had been visited by Dr. G. of this place previous to my seeing him. He had given him *Podophyllin* as a cathartic, which acted very severely, producing watery discharges. Upon examination I found the abdomen very much swollen, the tumor occupying the centre of the abdomen, and extending into the right iliac region. There was no pain nor tenderness upon pressure; tongue coated white; pulse 120; surface dry and hot. Prescribed *Hydrargyri, Chloridi. Mit*, gr. 60; *Dover Powder*, gr. 36. Divide into six powders, one to be given every four hours. *Potassa Acetas*, ℥ ss; *Aqua*, ℥ vii. Dose teaspoonful every two hours. May 16th, but little alteration; bowels had moved three or four times, pulse the same. Continued same treatment, with a diminution of the *Hydrarg.* May 17th, tongue beginning to clean off; pulse 110; bowels had moved twice, during which he had passed twenty worms; surface slightly moist, but as yet there is no diminution of the tumor, neither does he manifest any pain or soreness. Ordered *Ferri et Quiniæ Citratis* in doses of six gr. every four hours. May 18th, called in Dr. S. in consultation. Continued same treatment in addition to *Potass. Iodidi.* Continued this treatment for several days with no perceivable change or

diminution of the tumor. But the patient gradually gained strength, and during the time walked about the yard. And from this time he began to emaciate gradually, and June 16th was worse again. Tumor was quite as prominent as before, but has become general over the whole abdomen, with considerable pain; pulse 120 per minute with slight vomiting; bowels had moved in the morning, and urine had passed off freely. Prescribed *Opiates*, with *Syrupus Ferri Iodidi.* At this point a pustular eruption made its appearance upon the face, and gradually extended over the whole body. Two days later his bowels began to move off freely, accompanied with much pain. The treatment here consisted of *Astringents*, with *Tonics.* From this time he began to emaciate, and expired on the 15th of July.

A few days previous to his death the tumor became much softer, simulating a dropsical effusion. After the tumor began to soften he passed urine very freely, almost constantly. A *post mortem* examination was requested, but the friends would not consent.

Now to review the case briefly:—1st. The tumor appeared in the form of a pyramid, the umbilicus occupying the top and centre of the pyramid. 2nd. The tumor was as hard as adamant. 3rd. A few days previous to the patient's death the tumor became soft, (and I will state here that no pus was passed at all, neither was there any fluctuation to be felt in the tumor at any time.) His appetite remained good throughout his sickness. He was a mere skeleton at his death. 4th. What was the difficulty?

The case has been reported substantially as it occurred, and if deemed worthy of publication, we should be pleased to have the views of some of the numerous readers of the JOURNAL.

B. F. LIGHTFOOT, M.D.

MURRAYVILLE, ILL., *July 21st*, 1868.

PHILADELPHIA CORRESPONDENCE.

PHILADELPHIA, *August* 3, 1868.

MEDICAL EDUCATION.—It is remarkable that in the discussions which have been maintained in the meetings of the American Medical Association on the above topic, men who have been supposed to be among the "*soundest* of the *sound*," should advocate the resolution which was offered two years ago relative to this matter. That the standard of medical education and profession should be high; that men who are to take lives in their hands should be amply qualified thus to do, no sensible man doubts or disputes; but that any man should be allowed to run on in any path he desires while *preparing* for his lectures; that he should be sent to our colleges unable to tell where Peru or Greenland are; unable, scarcely, to write his name properly, or certainly to spell with correctness. In short, devoid of a common school education; and in this state of mind thrust upon our colleges, and as he approaches the Dean is told, "Now, sir, you are here, and here you must stay four years. You must learn geology, botany, astronomy and philosophy, in addition to your regular studies of the profession." How absurd does this seem to us! Not that we have a lower opinion of medicine than we ought, or than others. Not because we think the physician goes well enough prepared to go from his college, and simply because it is a piece of injustice to the faculty and to the student. That many an one goes away from our colleges ill prepared for his duties, we grant; but is this the way to remedy it? We think not. On the contrary, it is just the way to check the prosperity of our colleges, and to dishearten many an one who, if properly instructed, might adorn his profession. Such a plan existing, and what would be the result? A man coming from some country village to Jefferson College, or Rush College, or elsewhere. He has been under his *preceptor* (?) a

certain length of time; knows what the spinal column is composed of; knows, perhaps, the description of the *sphenoid* bone *by heart;* can tell you where the *glutæus muscles*, or the *sphincter ani* are, but when told that he has to learn all about geology, etc., etc., and that he must stay "three years at the least," he holds up his hands in holy horror, and leaves for the plough again.

Now, what is the way to bring up the standard of medical education? How shall the colleges send forth men better prepared for their duties? Not in this way. Let the standard be raised in the *preceptor's* office. Here is the place, and no where else. Let him there go through the proper preparatory studies, and, if necessary, undergo an examination prior to entering the college. By such means medical gentlemen will go out into the world better fitted, and the colleges will be prosperous in the extreme. If such men as the "gentleman from Cincinnati," or the "tall man with gray hair," from Philadelphia would advance such an idea as this in regard to medical education, and not such Utopian ones as they did, they could do far more good to the world, and reflect far more credit on themselves, with the hope of *sometime* seeing their scheme successful. Yours,

E. R. H.

BOOK NOTICES.

A Theoretical and Practical Treatise on Midwifery, including the Diseases of Pregnancy and Parturition. By P. Cazeaux, Member of the Imperial Academy of Medicine, etc., etc., Paris. Revised and annotated by S. Tarnier, Adjunct Professor in the Faculty of Medicine, Hospital Surgeon, etc., etc., Paris. Fifth American, from the seventh French edition, by Wm. R. Bullock, M.D. One hundred and seventy Illustrations. Philadelphia: Lindsay & Blakiston. 1868. Pp. xxxi. 1124. Chicago: S. C. Griggs & Co. Cloth, $6.50; leather, $7.50.

There are few books on this subject more widely known or more highly appreciated than this. It is unnecessary to enlarge upon the merits of the original editions by the celebrated author, whose comparatively recent demise the whole professional world laments. It is or should be in the library of every student and practitioner. The present edition has undergone at the hands of M. Tarnier many and important alterations and additions. Cazeaux's text is in large type—Tarnier's portion being indicated by a smaller letter. A single glance at the book will show that the latter's office has been no sinecure. Aside from additions, the plan of the whole has been so greatly modified so as to make it essentially a new work. Full credit is awarded to contemporaries, especially where new theories or procedures are proposed.

On the whole, this may be well considered as the most complete and advanced record of Obstetrical science and Gynæcology that is in the possession of the profession.

It is needless to say that the eminent American publishers have done their work excellently well. We trust they may be rewarded by the abundant sale this production so preëminently deserves.

THE ANATOMY AND HISTOLOGY OF THE HUMAN EYE. By A. METZ, M.D., Professor of Opthalmology in Charity Hospital Medical College, Cleveland, Ohio. Philadelphia: Published at the Office of the *Philadelphia Medical and Surgical Reporter*. 8vo. pp. xvi, 184. Price, $2.50, postage paid.

This is an exhaustive treatise on the subject, and yet both compact and clear. The older and more voluminous treatises on the Anatomy and Histology of the Eye, whilst wearisome to read, do not furnish a tithe of the matter this work contains. From the array of authorities (about forty) credited in the primary pages, we are promised the very latest and best information, and this promise perusal of the book shows to be religiously fulfilled. There are seventy-five neat and accurate illustrations, with lucid descriptions. The whole is issued in creditable style by the publishers. We congratulate the

author on the successful accomplishment of the effort announced in his preface, and the publisher on its elegant "make up."

KLINIK DER OHRENKRANKHEITEN. Ein Handbuch für Studirende und Aerzte, von Dr. S. Moos, Praktischer Arzt und docent an der Universität ein Heidelberg. Mit 26 in den Text Gedruckten Holzschnitten; Wien, 1866, Wilhelm Braumüller.

Those of our readers who are familiar with the German language, will find this an excellent work of reference in the case of Diseases of the Ear.

PROGRESSIVE LOCOMOTOR ATAXIA. Being extracts from two papers on this topic, read before the Wood County Medical Association, Parkersburg, W. Virginia. By WALTER COLES, M.D., Professor of Diseases of Women and Children in Medical College of Virginia.

The author in this tractate brings together the prominent characteristics of this much to be dreaded disease, and brings its pathological history up to the present time.

CHICAGO: Past, Present and Future. By JOHN S. WRIGHT. Chicago: Western News Co. 8vo. pp. 404.

Those interested (and who is not?) in this Metropolis of the North-west, will find herein recorded the reasons why its growth has taken place, and why it must continue. The author writes *con amore*, and with the confidence of one who can truthfully say *quorum pars fui*, having been one of the earliest settlers. It is illustrated by maps, views of public buildings, etc., etc. The task of compiling the array of facts and figures given must have been a very onerous one, and we have every reason to believe has been executed with perfect integrity and fidelity. Unbelievers in the continued prosperity and stability of this city, have only carefully to read and ponder this book to become convinced that Chicago will, at no distant day, rank as the second city on the continent. Buy it and read.

EDITORIAL.

Please Notice.

Correspondents and visitors will please notice that the heterogeneous jumble of names, known as the *Chicago Directory* for 1868–9, locates the Editor's office and residence at *Rush Medical College.* He has the honor of an official connection with that College, but his office is at 71 South Dearborn street, and his residence at 503 Michigan Avenue.

The oppositions of previous years made the several Directories tolerably reliable, but the *union* of the present year has proved any thing but strength, except to the olfactories. It will be difficult for visitors to find their friends or acquaintance, save by tracing them out in the Directories of previous years.

The Reform School.

We have only space remaining in the present number to call attention to the fact that, according to the circulars of the "*one school only in the United States,*" and its exposition in the columns of a contemporary, the pretended increase of requirements previous to graduation is a pretense and nothing more. The sliding scale adopted, as it is said, *temporarily*, can easily be seen to be a mere farce. The *status in quo* remains as before the Quixotic crusade of the "Phantom in Black."

The Nashville Imbroglio.

In a late number we referred to the decision of Chancellor Shackleford with reference to Professors Eve, Jennings and Jones. It seems that the case afterwards went into chancery, and Judge Milligan issued a writ of *supersedeas*, etc., etc., the effect of which is to oust these gentlemen and sustain the new appointees. The writ issued, and Professors E., J. and J. are solemnly commanded to desist from all efforts to enforce Chan-

cellor Shackleford's interlocutory order or decree, etc., etc. Whereupon Prof. Bowling issues a pronunciamento assuring the profession that everything is lovely, the new Faculty *en rapport* with right and justice, and harmony prevails. All of which we shall steadfastly believe until the next order from the courts. Meanwhile we can not conceive why the Nashville school is anxious to get rid of gentlemen so widely and favorably known as are Prof. Eve and his *confreres*. Do they drink too much? Or what is it? We await the issue of another circular to relieve our anxiety.

The Medical and Surgical History of the Rebellion,

Being compiled in the Surgeon General's office, seems likely to be delayed in publication through the failure of sufficient appropriation therefor. Sixty thousand dollars were appropriated by the act of June 8th, 1868, for the publication of this history and the medical statistics of the Provost Marshal General's bureau—thirty thousand each. The superior cost of the first causing some trenching on the resources of the second, a special resolution was passed July 25th, ordering the balance of the appropriation to be devoted exclusively to the Provost Marshal's figures. This action is exceedingly to be regretted, for the profession were looking to the completion of the former work with very great expectations of benefit. It is to be hoped that some means will be afforded, during the coming session, to expedite this most important work.

Cook County Hospital, City of Chicago.

WINTER TERM OF CLINICAL INSTRUCTION, 1868–9.—The regular course of Clinical Instruction in this Institution will commence on Friday, Oct. 2d, 1868, and continue for *nine months*.

The prosperity of this great public hospital, liberally supplied with the most adequate means for clinical and practical instruction, affords an extensive field for the study of every form of medical, surgical, and special disease.

During the year ending July 31st, 1868, over eleven hundred patients were treated in this hospital. Upwards of one hundred important surgical operations were performed.

In the lying-in department, there were ninety-eight births.

The large number of autopsies,—usually made in the presence of the class,—together with the pathological museum, give an excellent opportunity for the study of morbid anatomy.

The Dispensary, for out-patients, is organized so as to classify diseases, that every applicant shall receive the most thorough attention. This alone furnishes a large number of interesting cases.

Lectures will be delivered as follows: Surgical Clinics, with operations, and Medical Clinics, with examinations at the bedside, on Tuesdays and Fridays; Eye and Ear Clinics, with operations, and Clinic on Diseases of Women, on Saturdays, commencing invariably at half past one, and continuing two hours.

It is the purpose of the medical staff to use and develop the immense resources of the hospital for the promotion of medical education, and to add whatever is possible to the means and facilities for medical study attainable in Chicago. The object for which they will earnestly labor being an elevated standard of professional knowledge among the students, and such junior practitioners as may seek our city for this purpose.

Fee for admission to the Hospital, $5. Graduate practitioners free.

Lectures on the Eye and Ear.

In addition to the course of lectures and operations on the Eye and Ear, embraced in the regular term of clinical instruction at the County Hospital, Dr. Hildreth will also deliver a *special course* on these organs.

The theory and uses of the ophthalmoscope, the analysis and treatment of the "accommodation," astigmatism, and other optical and mechanical defects of the eye will be dwelt upon.

The methods of exploring the ear will be fully demonstrated.

The number of interesting cases in the Eye and Ear Wards of the Hospital, ensures abundant opportunity for becoming familiar with ophthalmic and aural disease.

The Charitable Eye and Ear Clinic—a Free Dispensary, established by prominent citizens of Chicago, is likewise accessible to students.

The hospital ticket admits, without further charge, to all of the above.

O'Reilly Prize.

Dr. John O'Reilly, of New York, having offered, through the New York Academy of Medicine, a Prize of Six Hundred Dollars for an Essay on the Physiology and Pathology of the Sympathetic or Ganglionic Nervous System, the Committee of Award appointed by the Council of the Academy, have adopted, with the concurrence of the Council, the following Regulations:

I.—The competing Essays shall be sent in to the Chairman of the Committe, Prof. J. C. Dalton, No. 101 East Twenty-third street, New York, on or before the First day of March, 1869.

II.—Each Essay shall be marked with some distinguishing device or motto, and accompanied by a sealed envelope bearing the same device or motto, and containing the name and address of the writer.

III.—The Essay selected by the Committee shall be transmitted by them, together with its accompanying envelope, to the Council of the New York Academy of Medicine, under whose direction the envelope shall be opened and the name of the writer announced at the first meeting of the Academy, in May, 1869.

IV.—This prize is open for universal competition.

V.—The Committee have a right to reject whatever does not come up to a proper standard of merit.

Alfred C. Post, M.D., *Pres't of the Academy, on behalf of the Board.*

dilatation. This takes place as well from one effort of forcible inspiration, as by a series of profitable (beneficiares) inspirations, that is to say, followed by incomplete expirations. Then comes a series of movements in which expiration gains upon inspiration, which restores the original equilibrium.

It would be interesting to know the value of this diminution of pressure in relation to the quantity of air absorbed at each inspiration, but this experiment could hardly be made upon man.

Position in the Reduction of Inguinal Hernia—*By Dr. Joseph B. Bond, Yarmouth, Nova Scotia.*—Several years ago, I had a case in which the patient could not reduce an inguinal hernia while lying in bed, either on his side or on his back, but as soon as he stood on his feet there was not the least difficulty. If, on removing his truss before going to bed, he neglected to apply his hand to the part and allow the rupture to protrude, he had always to get upon his feet before he could reduce it. Soon after this I was called to a case of strangulated inguinal hernia. After making every effort in the usual way to reduce it, I directed the patient to stand up; I placed myself (also standing) behind him, and encircled his body with both my arms, grasped the tumor with both hands, and effected in a few minutes what I had failed to accomplish in as many hours. Since then I have had many cases of inguinal hernia in my own practice, and several where I have been called in consultation, and have never failed to effect a reduction in a few minutes in the way I have described. I have never seen this means tried in the Hospital in Philadelphia nor in the London Hospital, although in both these institutions I have repeatedly seen all efforts fail to reduce an inguinal hernia without an operation. Nor have I ever seen it recommended in any surgical work.

My object in sending you this communication is to ask my medical brethren of the metropolis to give the erect posture in the reduction of inguinal hernia a fair trial, and to publish the results. In femoral hernia the erect posture has never succeeded in my hands — in three cases I have been obliged to use the knife — in inguinal, never. I will not attempt to account for the use of the erect posture in the reduction of inguinal hernia, nor for its failure in femoral. It may be thought that the erect posture favors reduction by causing syncope, but in only two cases do I remember that a feeling of faintness was complained of. In the last case (only a few days ago) the patient, an old man, fainted and fell as soon as the gurgling began to be felt, and I finished the reduction whilst he was prostrate.—*Medical Times and Gazette.*

Peroxide of Hydrogen as a Remedy in Diabetes—*By Dr. John Day, Geelong, Australia.*—[The patient was 36 years of age, and was progressively getting worse, passing as much as five quarts of highly saccharine urine during each night.]

While pondering over the hopeless condition of my patient, it occurred to me that if I could oxidize the sugar that had been taken up in the general circulation, it would be an approach towards the natural mode of elimination by the lungs. With this object in view, I gave half-drachm doses of ethereal solution of peroxide of hydrogen mixed in an ounce of distilled water, three times a day.

To enable me fully to explain the theory on which I base my treatment, would occupy far more of your valuable space than I could justly claim. Schonbein believes that peroxide of hydrogen is H O antozone, and that the blood-corpuscles possess, in a very high degree, the property of decomposing it, and of transforming its antozone into ozone, without, in themselves,

undergoing any very rapid change; and he further believes that ozone is the only condition in which oxygen possesses any active combining properties. Assuming these views to be correct, we should possess in ethereal solution of peroxide of hydrogen, which would be rapidly absorbed, a ready means of destroying, by oxidation, the sugar in the blood, and of also maintaining the animal heat, which, in the treatment of diabetes, is an important consideration. I may observe, that what is sold by Mr. Robbins as Dr. Richardson's ozonic ether is, in reality, a solution of peroxide of hydrogen in ether. This may be readily proved by adding a few drops of it to a weak solution of chromic acid: a beautiful blue colour will be the result, caused by the formation of perchromic acid. This preparation is in every respect similar to that which I have been using, and in the therapeutical effects of which I have now had some years' experience.

I commenced the use of this new remedy on August the 10th, and, as the following extracts from my case-book will show, with most gratifying results to the patient:

Aug. 12th. From 10 P.M. to 10 A.M., passed about five pints of urine. Previously for many months, the quantity of urine passed during the night averaged five quarts.

13th. Quantity of urine passed during the night, rather less than three pints and a half. Thirst not so urgent.

14th. Quantity of urine passed during the night, two pints and a half. Urine strongly acid; specific gravity 1046. Thirst much less urgent.

16th. Quantity of urine passed during the night, rather less than forty ounces. The patient very much improved in every respect. I give her own words:—"I have no thirst now; no more than I had in olden times. I feel that I am cured if it will only last."—*Lancet.*

CARBOLIC ACID A CURE FOR TOOTHACHE.—Among the many virtues of Carbolic acid is that of giving relief from the pain of toothache. I have tried it in a great many cases, and with invariable success. To one drachm of collodium flexile (B. P. 1867) add two drachms of Calvert's carbolic acid, full strength. A gelatinous mass is precipitated. A small portion of this precipitate inserted into the cavity of an aching tooth gives immediate relief. It may be kept in the cavity by means of a bit of lint dipped in the collodium.—*Lancet, Feb.* 22, 1868, *p.* 275.

To the Editor CHICAGO MEDICAL JOURNAL— *Dear Sir:* Will you kindly insert the following notice or its equivalent in your paper, and thus aid a worthy cause?

THE NEW YORK MEDICAL COLLEGE FOR WOMEN will begin their Sixth Annual Term of twenty weeks, at their new College in Twelfth Street, corner of Second Avenue, the first Monday in November. For announcements, giving full particulars, address, with stamps, the Dean, Mrs. C. S. LOZIER, M.D., or the Secretary, Mrs. C. F. WELLS, Box 730, N. Y.

Comments are unnecessary.—ED.

Committee of Awards.—J. C. DALTON, M.D., Professor of Physiology in the College of Physicians and Surgeons, New York; A. FLINT, Jr., M.D., Professor of Physiology in the Bellevue Hospital Medical College, New York; ALFRED L. LOOMIS, M.D., Professor of the Institutes and Practice of Medicine in the University Medical College, New York.

☞ Medical journals are particularly requested to copy.

NEW YORK, *December*, 1867.

FOREIGN NOTES AND EXCERPTA.

M. A. TRIPIER, in a paper read before the Academy of Sciences, Paris, (June 15), suggests the use of anæsthetic inhalation for the relief of every form of hepatic colic. He takes the ground that it is upon the activity of the reflex function that the expulsion of calculi depends. He further asserts that experiments, in which section of the spinal cord has been practiced, the pathological observations of cerebral paralysis of Marshall Hall, and the results of chloroformic anæthesia in obstetrical practice, demonstrate that the most certain means of increasing the intensity of reflex phenomena is to isolate the organs which constitute its seat, from the controlling influence of the brain. In the case under consideration, the intention is to induce temporary cerebral paralysis, under the influence of which the intensity of reflex phenomena may be increased, and thus the expulsion of the calculi effected.

THE exhaustive discussion upon tuberculosis, which has occupied the Academy during so many months, still drags its slow length along. It will undoubtedly develop all that is known upon the subject up to the present date in France.

In view of the marked increase in the prevalence of pulmonary tuberculization in Paris, the medical society of the hospitals of that city has appointed a special commission (*Commission de Phthisiologie*) to pursue the study of this specialty, and has nominated MM. Hérard, president, Chauffard, Moutard-Martin, Villemin, and Potain, secretary. This commission appeals to all physicians to communicate to it all the facts bearing upon the etiology of tuberculosis.

DR. LAWSON reports to the *London Lancet* a case of eschar, produced upon the breast of a young woman from the effects of pulverized ether.

MESSRS. Protheroe Smith and Heywood Smith, report to the same journal favorably upon the tetrachloride of carbon as an anæsthetic agent. As the result of fifty-one experiments, they recommend its use to relieve pain in Cephalagia, Dysmennorrhœa, Toothache, and that in particular it diminishes pain while it does not diminish the intensity of the contractions of the uterus.

MR. BIRKETT (Guy's Hospital), reports the complete reunion of a severed metacarpal bone, by means of wire suture, applied through perforations made in the bone. The same surgeon reports also a case of fractured lower jaw treated successfully in the same way. Also, several cases of ununited fractures of bones, by the introduction of ivory pegs between the fragments.

M. FOLKER reports to the *Gazette Médicale* a case of poisoning by swallowing three grains of strychnine, which was successfully treated by inhalations of chloroform. This is the second case reported.

TRICHINIASIS AND THE TRICHINA is again occupying the attention of the Academy of Sciences (Paris). M. Colin has just presented the results of his investigations into this subject in its relations to Zoology, Hygiene and Pathology. The Hygienic relations of this parasite are the most immediately interesting, and in these nothing specially new is elicited.

We learn from Suez that this year the return of the pilgrims from Mecca has been effected in the midst of the most favorable sanitary conditions The measures adopted by the international conference at Constantinople have operated in the most satisfactory manner.

Seven thousand two hundred and twenty-six pilgrims arrived at Suez, by sea and land. They have been kept in quarantine, and out of the entire number, but twenty-five have died at the lazaretto—twelve of dysentery, eight of pulmonary disease, and five of old age.

BIOLOGICAL SOCIETY — PARIS.— 1. *Physiology:* Changes in the pressure of the air in the chest during the two phases of the respiratory act. By M. P. Best.

During inspiration, a true diminution of pressure exists in the lung, and during expiration a compression of the air. In other words, the calibre of the trachea is not sufficiently large for the demands of the respiratory movements. This is shown by diagrams taken under the following conditions: An animal is placed under a bell glass with tubular attachment closed below, whose capacity is from four to five times the volume of the animal. By means of the tube a communication is established with the drum of Masey's polygraph, the registering cylinder being set in operation, the lever is seen to move in a certain direction at each inspiration of the animal, and then to go in the opposite direction at each expiration succeeding.

The movement following the inspiration indicates an augmentation in the volume of the air contained in the bell. Now this can take place only in consequence of an energetic demand which the animal makes, a demand which is not sufficiently satisfied by the exterior air; so that the air of the lung is dilated again in volume for the system. The contrary takes place from the moment of expiration.

Here is certainly the most simple and the most convenient mode of studying the rythm, and the different conditions of the respiratory movements in animals. It is remarkable that the different animals do not give identical results. Thus a dog, a cat, a rabbit, a duck, all of nearly the same volume, having been placed successively under the same bell, the most emphatic line was that of the duck; then came the dog and the cat, which resembled each other nearly, and after a long interval the rabbit, which made only a great number of minute, rapid oscillations. The same difference was presented by a guinea pig compared with a pigeon. A turtle effects decided movement; an adder and a frog, none at all.

After an interval of some minutes the curve is seen to direct itself in its totality, in a manner which seems to indicate an absorption of the medium: this is due to the insufficient production of carbonic acid, compared to the oxygen supplied. When the animal is excited, the curve is elevated in a manner to indicate a great demand for air, intrathoracic

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—SEPTEMBER 15, 1868.—*No.* 18.

PATHOGENESIS.

The Pathological Anatomy and Pathogenesis of Disseminated Chronic Pneumonia, and of Pulmonary Tubercles. By H. LEBERT, *Professor of Clinical Medicine of the University of Breslau.*

TRANSLATED BY WALTER HAY, M.D., ASSOCIATE EDITOR CHICAGO MEDICAL JOURNAL.

(*Continued from p.* 559.)

THE pulmonary tissue around these inflammatory foci is rarely normal in their immediate proximity; most frequently hyperæmia, carnification, and diffuse lobular pneumonia may be associated with it temporarily. At other times, the diffuse pneumonia has pursued its ordinary progress, but in place of terminating by resolution, it has passed through in the main all these same phases which have just been described under disseminated chronic pneumonia, which ordinarily is then developed at the same time, and the greater part of the time consecutively in other portions of the same or in the other lung. There is thus presented the intermingling of diffuse and disseminated chronic pneumonia.

The pleura participates almost constantly in chronic pneumonia with scattered force, ordinarily with adhesions, thicken-

ing rather than with fluid effusion. When these adhesions are solid, old, thick, they produce at once immobility of the corresponding intercostal spaces, and a fibrous transformation propagating itself, step by step, from the surface of the lung into its interior.

It is through these adhesions that the collateral circulation is, in part constituted, supplying the place of the numerous vessels whose disappearance has been occasioned by the chronic pneumonia.

The relation of tubercles with pneumonia has been indicated in a different manner. Some assert that there are almost always tubercles when chronic scattered pneumonia exists; others regard this as consecutive. I have arrived at the opposite conclusion, that disseminated chronic pneumonia exists most frequently alone without tubercles, and when these latter are developed, they are generally of a more recent date, rather consecutive, sequences not consequences of the pneumonia. The greater portion of the cicatrices at the summits of the lungs are of inflammatory, not tuberculous, origin.

As, in general, every prolonged inflammation develops secondary inflammations, so is it with disseminated chronic pneumonias, phlegmasiæ which tend to a process of ulceration and necrosis.

Among the frequent localizations of this kind, ulcers of the larynx, the epiglottis, of the vocal cords, and of the arytenoid region should be mentioned. Ulcers of the trachea are rare, and still more so are those of the bronchi, whose mucous surface is ordinarily the seat of chronic inflammation; however, in the smaller bronchi the process of cavernous ulceration may as well originate from the mucous membrane as attack it secondarily.

Further, the pneumonic foci occasion the disappearance of many of the minute bronchial ramifications, whilst other and more voluminous branches dilate, especially in the upper portions of the lungs. The bronchial glands are ordinarily tumified and exhibit sometimes little hyperplastic (tuberculous?) foci, or more extensive yellowish infiltrations.

When many of the bronchial glands are infiltrated and voluminous, they compress the nerves and neighboring vessels, and thus provoke grave complications. I have likewise, also, observed an hypertrophy, simple but considerable and multiple, of these glands in disseminated chronic pneumonia as well as in pulmonary tuberculosis. When the infiltrated bronchial glands suppurate, the abscesses may open into the pericardium, into the vena-cava superior, into the bronchi, into the œsophagus, into the lungs, and the pleura. On the other hand, it is not rare to find bronchial glands consisting of desiccated infiltration of stony concretions.

The heart is normal, small, with a tendency to fatty degeneration when the marasmus has attained considerable proportions. The digestive tube is rarely healthy. Gastric and intestinal catarrh and especially ulcers of the small intestine and of the colon, even without any intestinal tubercles whatsoever, occur. The mesenteric glands often exhibit the yellowish infiltration of tubercular appearance as the bronchial glands; stony concretions, likewise, especially are found there; suppuration is here rare. The peritoneum becomes inflamed, especially in the vicinity of intestinal ulcers; here are observed inflammatory granulations much resembling tubercles, which are themselves far from being rare in this serous membrane; there are also found here, especially, voluminous yellowish masses, surrounded with much black pigment, sometimes even with a cortical substance, cellulo-vascular, a true inflammatory product, which in its turn has developed by cellular multiplication these compact or soft masses of a dull yellow color. Inflammatory or tuberculous granulations are found also in the filaments, bridles and false ligaments consecutive to peritonitis. Besides the adhesive and plastic character, besides the complication with true tubercle, there are likewise found serous and sero-purulent fluids. Tubercular peritonitis may exist associated with chronic pneumonia, as well as with pulmonary tubercles, just as a peritonitis, not tubercular, may complicate these two kinds of pulmonary alteration. When profound intestinal alterations exist, the liver is ordinarily fat.

Very small miliary tubercles are here very frequently met with in true pulmonary tuberculization, but very rarely in chronic pneumonia. The same is true of the kidneys and the spleen. These three organs may likewise be the seat of amyloid degeneration, and then the intestinal ulcers may have the same origin. This especially is a very frequent complication, but not a sequel of disseminated chronic pneumonia. Among the cerebral alterations, inflammation of the internal membrane of the ventricles, and acute hydrocephalus are met with in a certain number of cases; tubercular meningitis as well as more voluminous tubercles of the dura mater and of the brain are more frequently consecutive to true tubercle, and sustain scarcely any intimate relation with disseminated chronic pneumonia. In the large tubercular masses of the nervous centres, it is not rare to find a vascular envelope with a connective tissue in process of prolification, a tissue of a reddish yellow, sometimes semi-transparent, which towards the centre of the tubercles becomes dull, dry, and sometimes exhibits softened portions. The kidneys are rarely diseased in chronic pneumonia, but are sometimes the seat of parenchymatous inflammation. Large tuberculous masses with ulceration are here rare.

Tuberculosis of the mucous surface of the genito-urinary organs has this peculiarity, that it constitutes rather an incrustation of the mucous membrane than a submucous deposit.

The testicle, especially the epididimis, may also be the seat of disseminated inflammation, at a later period confluent with a dull, yellow, dry infiltration rather than with true tubercular granulations.

It may be said that generally disseminated chronic pneumonia is combined much more frequently with secondary inflammation than with tubercles of different organs; but if in the lungs even tubercles co-exist with disseminated chronic pneumonia, they are much rather its sequence than its cause. Tubercular alterations of other organs may in their turn occasion in the lungs pneumonia foci, either disseminated or confluent. Then, indubitable tubercles of other organs do not

permit the decision *a priori*, that the accompanying pulmonary alterations are on that account of a tuberculous nature.

Acute tuberculization of the lungs, and acute disseminated pneumonia.—It is only in these acute, or to speak more correctly, subacute affections, that tubercles predominate greatly. I will even add, that very often in disseminated chronic pneumonia, the progress becomes subacute when tubercles have been superadded. Here, then, is the best moment for us to explain what we understand by true tubercles.

The true tubercle is a granulation composed of a cellular proliferation resembling in all respects an inflammatory non-suppurative hyperplasia of connective tissue.

These cellular elements are incompletely developed, surrounded by a solid or gelatiniform intercellular substance; their size varies from one two-hundreth to the one one-hundred and twentieth of a millimetre; their contours are irregular; they exhibit but rarely a distinct nucleus which appears ordinarily closely surrounded with cellular membrane, to such a degree that the membrane of the cell and that of the nucleus form but one body, so to speak. These are the terms in which, since 1844, I have described the cellular element of tubercle, ascribing to the almost solid intercellular substance, in complete development, and I might add cellular aplasia, which causes the granular infiltration to give to the centre of the granulation, at first, and afterwards to the whole of it, a dull yellowish aspect; moreover, there are found sometimes, with these ordinary elements of tubercle, cells more voluminous enclosing these same corpuscles, which I have seen likewise developed in epithelial cells; moreover, I have, since this date, described, as often surrounding true tubercle, granular epithelial cells and pus-cells. I still to-day maintain this to be the correct description of true tubercle. M. L. Meyer,* in a work generally much valued, published about three years ago, describes tubercles in an identical manner twenty years after me. I quote the following passage from his work in

* 1 Virchow's Arch., vol. XXX., p. 62, 1864.

order to enlighten those who have thought proper to attack my description, and of whom several have burlesqued it, in a manner very little in harmony with the serious spirit of my work:

"The characteristic element of the tubercular focus, says M. Meyer, consists in little cells closely juxtaposed, with opaque margins, with simple nuclei as their principal and sole contents, seeing that this nucleus is ordinarily embraced to such a degree by the cellular membrane that the whole cells might be taken for a nucleus. These cells are of unequal size, smaller than those of pus, ordinarily of the size of blood globule, rarely altogether round, etc. Moreover, there are found multinuclear cells belonging in the vicinity, corresponding to an anterior phase of the development, true mother-cells of the little tubercle cells. I am, moreover, satisfied that even those who have attacked my observations have figured within a slight shade, the elements of tubercle as I have. In the last No. of my great work on Pathological Anatomy (1861), I described and figured the development of tubercle as a cellular proliferation of connective tissue.

"In order to show that, from the beginning, in spite of the inferiority of the methods then attainable, I have separated the surrounding inflammatory products from pulmonary tubercle, I should quote, amongst others, the eighteenth aphorism of the conclusion of my work, in the Archives of Müller, of 1844. There is sometimes found around tubercle a particular form of chronic inflammation, with yellow hepatization, of increased consistency. The tissue of the pulmonary vesicles, of the minute bronchial tubes, of the interstitial tissue, is found filled with coagulated fibrine, with fibres of new formation, with granular epithelial cells, and in the midst of these foci of chronic hepatization of slight vascularity, are found foci of acute lobular pneumonia rich in sanguineous vessels."

This represents, moreover, the state of the question in 1843, in which I found nearly a complete blank for microscopic observations, and it must be admitted that it certainly was an advance to offer at that time these descriptions in total oppo-

sition to the two reigning opinions, that of the amorphous character, and that of the purulent origin of true tubercle. My principal object, at the epoch, was to demonstrate the organized and cellular nature of true tubercle, and the difference between these cells and those of pus.

Even to this day, I am reproached, first in Germany and later in France, with having regarded these cells as the specific element of tubercle. If such was my interpretation, it was more than twenty years ago, and it has been likewise a considerable number of years since I have professed the conviction that the microscopic elements of tubercle were not the essential part of it, nor even the specific cell. I ask indulgence from no one, and if any one will do me the honor to quote my observations, I have the right to exact that he should be familiar with them, and that he should not assume an obsolete point of departure as fixed and in force with me to-day, when it is so easy to bring proof to the contrary. Each year, and especially since 1856, I have pronounced against the specific character of the cellular elements of tubercle. Let it suffice for me to quote two additional passages from my works, which I believe decisive and irrefutable in this relation:

I. I state in my Pathological Anatomy: * "If I recognize specific elements as the anatomico pathological diagnostic of tubercle, far be from me the thought that these little cells enclose the essence of tubercle and constitute its specific elements. The discussion between my adversaries and me would only involve a difference of opinion of the value of these elements as means of microscoped diagnosis."

II. In 1858,† I declared in the Medical Journal (Nebdomadaire) of Vienna, that morbid products, altogether different from tubercles, exhibited the same little cells, and could not be distinguished from tubercle by the microscope, and upon the occasion of a case of glanders, I pointed out, as microscopically almost identical with tubercle, the little tumors, not

* Anatomie Pathologique, tome 1, page 668.

† Weimer Medicinische Wochenscrift. Jahrgang 111. Page 708.

yet suppurated, of glanders, and recent gummy spyhilitic tumors. I pointed out as the cause of this microscopic similarity a similar mode of formation anatomically. I add that this resemblance of three products so profoundly different in pathology, should furnish a new proof that we should judge a disease from an assemblage of all the characters, and not from an isolated series of signs. I terminated these reflections by remarking that they proved in a very clear and concise manner that in pathological anatomy and in pathology, the microscope might be a useful and faithful servant, but should never become the lord and master. If, after these citations, any one should still apply to me the reproach of sustaining the microscopic specificity of tubercle, it is clear that he expresses by it his own criticism and not mine.

The passage of the cell of the connective tissue in process of proliferation towards tubercle, may be well studied especially upon serous membranes. It is not rare to see there, in the neighborhood of tubercle, disseminated groups of these cells in process of hyperplasia, and they will be found also throughout their progress up to the masses which form the granulations. Moreover, it appears to me more and more probable, that other cells than those of a connective tissue may also give origin to tubercle corpuscles. In the case of miliary granulations, some of them are often seen, with a good lens, much smaller, almost microscopic. It is in the summit of the lungs that their number is the most considerable, whether they be isolated or in groups. With some care, one may see not unfrequently, granulations in the tracheo-bronchial mucous membrane. They are ordinarily yellowish. I have here seen no semi-transparency.

Besides the granulations, there are likewise found in the summits of the lungs, sometimes little inflammatory infiltrations, lobular or a little more extensive grayish or semi-transparent, or little yellowish foci of true disseminated pneumonia foci, either granular or lobular, compact or already softened at the centre, even to pisiform cavities of the volume of a nut or even greater. Even in some cases of acute disease

of the lung, with every appearance of true tuberculization; there have been found nothing else than disseminated and confluent pneumonia foci.

If we thus perceive new points of contact between disseminated chronic pneumonia and acute tuberculization multiplied, another fact more important still appears to dominate, so to speak, this one. In the great majority of autopsies of acute tuberculous affections, there are found old foci of disease; amongst these by far the smaller number consist of old tuberculous granulations truly healed, shriveled, surrounded by black pigment. More frequently, on the contrary, there are found in the pulmonary summits old, yellowish pneumonic foci, from the smallest size up to that of a pea or of a bean, mingled with much pigment and callous, and apparently cicatricial connective tissue.

At other times there are found old, yellowish pneumonic foci, which have preceded the appearance of the tubercles by weeks or months. In other cases still, and quite frequent likewise, extensive tuberculous cavities with irregular walls, sinuous, enclose a purulent or muco-purulent detritus, coexistent with the recent tubercles of acute character, as evidence of the ulcerative pneumonia anterior to the granulations. Lastly, the bronchial glands, in subjects who have succumbed to acute tuberculosis, often enclose an old, yellowish infiltration still rich in cells, or a chalky deposit or true stony concretions. All these conditions may be combined in these different modes. I have avoided up to this time giving statistical statements of recorded facts, and reserving these data for a voluminous work upon chronic pneumonia and pulmonary tubercles, upon which I have been for a long time engaged. Nevertheless, I can not resist the temptation of communicating here the following statistical statement:

Without reckoning the more recent facts, not yet analyzed, I possess sixty-six personal observations, with autopsies of acute tuberculization, free or associated therewith by many points of contact. Eleven times only, or in sixteen per cent. nearly, there existed only three tuberculous granulations

without trace of old deposits, but it is possible that some may have escaped my notice, since formerly I did not attach nearly so much importance to this coincidence as at present. Six times there were acute tubercles combined with recent disseminated pneumonic foci; once there was general acute tuberculization, the lungs not being involved. There remain but forty-eight cases, or about seventy-five per cent. in which the old foci existed; four times there were tuberculous granulations alone, and in all the other cases pneumonic foci, cavities and old infiltrations of bronchial glands. It is very natural to seek in this coincidence the relation of cause and effect, and just as in disseminated chronic pneumonia, complicated with tubercles, these are consecutive, so likewise acute tuberculization is, in a sufficiently large majority of cases, consecutive to anterior pneumonia foci. We are struck with this other fact that acute tuberculization has been preceded by anterior miliary tubercle, infinitely more rarely than by inflammatory foci.

Another fact under our observation comes to the aid of the influence of prolonged anterior inflammatory process upon the production of tubercles. There are two of our observations in which a chronic purulent pleuritic effusion preceded, and probably occasioned, an acute consecutive pulmonary tuberculous affection.

Let us observe, in passing, that the four cases of old healed tuberculous granulations are evidence in favor of the curability of acute tuberculization, and serve to corroborate my diagnosis in two cases, in which I saw patients exhibiting every evidence of acute tuberculization of the lungs, gradually restored to health.

As to the seat of these tuberculous granulations, to judge by the naked eye, the interstitial tissue, the air cells, the bronchial ramifications, the subpleural tissue, and the pleura appear to be attacked. It is especially important to fix their point of departure and origin. In the pia mater this takes place along the vessels, and in the lymphatic fluid, which surrounds the arterioles. According to Virchow, it is less the vessels than

the fundamental tissue of organs which would give origin to tubercles. Lelleyer has observed the same in the non vascular organs in the corpuscles of Pacchioni. My histogenetic investigations have not, thus far, led me to satisfactory results; however, I desire henceforward to put myself on the defensive against every exclusive theory upon this subject. Colberg, in his excellent *investigations into the formation of tubercles*, admits that at a later epoch, the cellular tissue and the sanguineous vessels are effected with tubercular proliferation, just as alveolar inflammation originally epithelial may involve the interstitial tissue and the blood-vessels; but he indicates the cells of the capillary blood-vessel as the constant and exclusive point of departure of true tubercle.

I do not question the accuracy of these observations; whilst I can not yet decide upon so exclusive a genesis of tubercle by the capillary cells alone. We see in the heart the vascular structure in the endocardium with all its layers, a powerful muscular mass, to which is added the apparatus of a force pump of great power; then we perceive the elastic and fibro-cellular elements of the arteries diminish perceptibly in the veins.

Lastly, in the capillary vessels there remains no more than a single membrane, the internal epithelial tunic.

This important fact has been demonstrated in a certain manner by the beautiful investigations of Dr. Auerbach (of Breslau) and he calls these cells — which, reunited, form the capillary tube — perithelia; it is clear that these cells placed together and reunited, in order to form in their continuity a smooth and continuous tube of uniform calibre, could not become the seat of a true proliferation unless the capillary vessel might disappear; the blood would find itself then in the lacunæ, in place of circulating in the canals. Then the proliferation could only originate from the nuclei of these perithelial cells, and here especially would the capillary ruptures be frequent in consequence of this hyperplasia.

I have even, during a long scientific career, willingly conceded that theoretical objections ought to yield to observation,

especially emanating from a source so good. In admitting, then, that the perithelia of the capillary vessels serve as an essential point of departure for tubercle, we will with difficulty comprehend that these cells having so great an affinity to epithelia, these latter should be excluded from all participation in the tubercular endogenesis. I would add, that in my experiments, pulmonary tubercles, established in animals by inoculation of human tubercles, have appeared to have especially for their base cells very like epithelia.

On the other hand, I admit likewise willingly that even the yellow alveolar and epithelial miliary granulations of the lungs are completely different from true tubercles, and I have been able, in miliary and lobular disseminated pneumonia, without subacute tubercles, to follow all the phases of alveolar epithelial proliferation with the most extensive inflammatory foci in which the yellow infiltration was combined with diffuse gemmation of conjunctive tissue, colored by an abundant pigment, and in one case, which at other times would have been assimilated to acute tuberculization, I have seen these confluent foci as large as an apple, and even, in one of the lobes, equaling two thirds of its contents.

The pulmonary tissue around true granular tubercles appears very often entirely healthy, even anæmic, in consequence of a species of compensatory emphysema. At other times one finds around all its phases a simple hyperæmia, with alveolar collapse, or even little inflammatory infiltrations. Moreover, there is perceptible in the infero-posterior portions of the lungs, quite frequently, carnification and emphysema upon the pulmonary borders, as well as in the anterior and superior parts. Pleuritic adhesions are frequent, and the pleura offers, besides the microscopic granulations, groups of fusiform conjunctive cells in process of proliferation, and likewise little circumscribed thickenings of the sub-pleural tissue, exhibiting in an especial manner the appearance of drops of wax. These, then, are the irregular points of cellular multiplication, as in the inflammation, accompanying true tubercle.

In one-fourth of the cases, I have found pleuritic effusion

from half a quart to a quart and a half of serous or sero-purulent fluid.

In two cases in which tuberculous granulations were developed subsequently to the pleuritic effusion, this latter, chronic and purulent, has appeared to be the point of departure. A fact which corroborates this view of the question has been communicated to me recently by Dr. Ebstein, the distinguished pathological prosecutor of the hospital of Breslau. A woman suffering from organic disease of the heart with very serious mitral insufficiency, was attacked by caries of the femur with abundant and prolonged suppuration, and fell a victim to acute tuberculization of the lungs, a disease most rare in the course of an organic disease of the heart. Legendre,* in reference to tuberculous meningitis, reports that, in this disease, twenty-seven out of twenty-eight cases exhibited very numerous tuberculous granulations; in twenty-four cases a tuberculous infiltration much older, extensive and yellowish existed in the bronchial glands, as has occurred hitherto under our observation, old foci having preceded without having occasioned, by infection, acute tuberculous disease. I have been struck with the relative frequency of granulations of the pericardium with acute pericarditis in the course of acute tuberculosis. The heart ordinarily encloses clots, some soft, others fibrinous. Obstruction of the large veins is rare, I have observed it in the crural and in the jugular. Tuberculous meningitis in acute tuberculization is much more frequently found in the adult, according to my observation, than is generally believed. It is, as during infancy, accompanied by internal hydrocephalus, by plastic meningitis of the base and sometimes by more voluminous yellow tubercles of the brain.

Tubercles are rare in the stomach, more frequent in the small intestine, which may nevertheless exhibit non tuberculous ulcers.

As in infectious diseases, the intestinal glands and the spleen are often perceptibly tumified, even without trace of

* Recherches sur quelque maladies de l'enfance, Paris, 1846, p. 12.

tubercles. The mesenteric and retro-peritoneal lymphatic glands have been, under my observation, quite frequently the seat of old yellow tuberculiform infiltrations long anterior to the acute tuberculous affection. The peritoneum is frequently the seat of true tubercles, with or without peritonitis, but there are found here likewise simple cellular masses and granulations, more decidedly inflammatory. Colberg has determined very clearly in the epiploon likewise the formation of tubercles by hyperplasia of the nuclei of the capillary vessels.

In acute tuberculosis the liver quite frequently encloses granulations, and moreover many very small, which can be determined by examination with a lens. No one has better described their formation than E. Wagner.* According to him, the hepatic cells are at first seen interrupted at intervals by masses of nuclei, sometimes indeed quite separated by microscopic tubercles. The nuclei of the tubercles take their origin in the cells of the interstitial connective tissue, or from the external tunic of the hepatic vessels, or finally from the nuclei of the investment of the hepatic cells, which indeed play the principal part in their formation.

The multiplication of these nuclei takes place very rapidly, partly by division, partly by new formation, as this author still admits, although it is perhaps at this time generally denied. Moreover, men of the highest merit, like Robin and Broca, admit it likewise, and I confess that whilst admitting cellular division and endogenesis as the principal sources of their pathological formation, it is impossible, notwithstanding the most attentive study, always to arrive at the determination of this mode of formation of morbid products. Further, if cells can be formed freely by endogenesis on the interior of other cells, I see no reason why the same phenomena might not occur outside of cellular membranes by a species of exogenesis. Besides it is better here, as well as for generation generally, to admit, wherever generic observation fails, an unknown genesis in addition to that by proliferation, and that

* Dir tuberculose der leber (Archerder Heilkunde, von Roser, Wunderlich, eter.)

by endogenesis, as to make use, without sufficient proof, of the term spontaneous generation.

The spleen, moreover, whilst it is often diseased in acute tuberculosis without granular deposits, still quite frequently contains true miliary tubercles.

The same is true of the kidneys, in which, however, tubercles, still very small, have ordinarily a yellow color. Parenchymatous nephritis is rare in the disease now under consideration.

In cases of complication of acute tubercle with those of the testicle, which I have observed, this latter organ contains them ordinarily much older, and still more frequently infiltrations of a yellowish appearance and inflammatory origin, than granulations.

I have likewise, also, observed several cases in which acute pulmonary tuberculization supervened very rapidly in the course of an old chronic tuberculous, orchitis, or epididymitis.

The thyroid gland has presented to me several times true tubercles. In Switzerland I have observed all the forms of goitre amongst patients who had sunk under tuberculous disease, and I cannot comprehend how any one can admit an antagonism between goitre and tuberculosis. I terminate this sketch of true tubercle by insisting upon the fact, that it is almost always multiple, not only in one but in a certain number of organs, multiplicity being so much the more generalized as the subject is young and approximating infancy.

STRANGULATED INGUINAL HERNIA AT NINE WEEKS OF AGE.

BY CURTIS J. FENN, M.D., CHICAGO.

THE little subject was born of young and healthy parents, and began immediately to thrive upon its mother's milk. It cried a good deal at times, and had occasional diarrhœa, but of easy control. It was finally taken to the country, in the

vicinity of Blue Island, with benefit; on returning at the end of a fortnight it seemed to have more than ordinary promise. The mother carried it constantly on her lap, so that no direct injury could have happened to it. The night following its return it suffered with the colic, as the parents thought. Nothing gave it ease. Its cries became distressing, and continued with but slight intermissions. In the morning a tumor was discovered in the scrotum.

I first saw the case at 8, A.M. A fine, chubby boy. Its cries were pitiable in the extreme, between intervals of a few minutes sleep. It nursed; did not vomit; the abdomen was slightly tympanitic; the bowels had moved scantily morning and evening of the day before. The scrotum was œdematous and red; a tumor existing within the right side, oval shaped, about an inch in its long diameter, and extending along the inguinal canal. The right testicle was not perceived; over the most prominent part the swelling was a shade darker. An attempt to reduce its size by manipulation was unsuccessful; no impulse was felt over the external abdominal ring. Hot clothes were applied, and camphorated tincture of opium given in sufficient quantity to produce continued sleep.

Three hours later the hardness of the tumor was diminished, but on crying again its size was increased. Persistent efforts were now made for its reduction by means of *Chloroform* and pressure, with partial success; 12 M. there was a small evacuation of the bowels; 1 P.M., the size of the tumor had been reduced one-half. There was by this time occasional vomiting of natural matter from the stomach. Digital compression was continued through the whole afternoon. The tumor was further diminished in size, but became harder, the hardness extending up the line of the cord. The child lay profoundly sleeping the rest of the day. In the night its cries became incessant. *Paregoric* in large doses failed to quiet.

Early the second day prostration was marked. The shade of discoloration was deeper, and the tumefaction greater. It no longer took the breast. Green matters were sometimes

vomited. The features were pale and sunken, and profound sleep had come again to the child's relief. 11 A.M. Prof. Gunn operated for the strangulation. Through an incision not more than an inch and a quarter long he found a deeply purple knuckle of intestine, filledwith hardened fæces. He opened the sack, slightly enlarged the internal ring, inserted it within the abdomen, and closed the wound with three delicate sutures. The testicle was now in its proper place, appearing natural. No blood had been lost. A light compress was closely fitted, and the child placed on its back and allowed quiet. It was comfortable during the afternoon. Three or four movements of the bowels followed during the night, discharges green. At the same time it became very restless again. *Paregoric* was given freely.

In the morning of the third day it was quietly sleeping. Its skin was hot and dry. The wound was pale. Milk and wine were given through the day, and at night one-sixteenth of a grain of sulphate of morphia; afterward repeated.

In the morning of the fourth day it lay perfectly quiet; took nourishment as before. The wound looked healthy. In the afternoon slight convulsions were excited during a thunder storm, and continued with little intermission for several hours. Its extremities became cold and pulseless, its respiration almost imperceptible. It afterward revived, then gradually sank, and, about noon of the fifth day, died without a struggle.

The case illustrates the danger of strangulation in congenital hernia; the exhaustion attendant upon suffering, and the fatal policy of delaying an operation when it is to become necessary.

234 THIRTY-FIRST STREET, *August 26th*, 1868.

A COMPLETED HISTORY.

CHICAGO, *August 29th*, 1868.

To the Editor of the CHICAGO MEDICAL JOURNAL:

WILL you be so good, if possible, as to give room to the subjoined?

CASE OF ALBUMINURIA TREATED WITH NITRITE OF UREA.

History.—Dr. W—— desired me to visit Mrs. ——, in consultation with him, on the 2nd June ult., whose history was as follows:

Mrs. H——; aged 29; carpenter's wife; tall, nervous and cachectic; mother of four children, youngest 18 months old. She states that fifteen weeks ago she was seized with severe pain in the lower part of the back, and became very ill, when she called a physician, who told her she was suffering from an attack of intermittent fever; and subsequently, that the more persisting pain in the back was the result of rheumatism. Her feet now began to swell, which extended to her legs, thighs and body. Her breathing became embarrassed, compelling her to be supported upright in bed. She became so weak that she required to be lifted from side to side in bed. About four weeks after the onset of her illness, an abscess broke over the pained part in the lower region of her back, and discharged a large quantity of matter. It has continued alternately to heal, re-open and discharge ever since. The swelling in her chest has diminished of late, but her thighs, legs and feet continued the same.

A short time ago her medical attendant brought another physician to see her in consultation. Immediately after this, her husband solicited Dr. W—— to attend her.

The foregoing "case" is notably interesting; but as the "history" given hardly covers the "case," I venture to add a little to that "history."

Early in March last, I was requested to see the subject of the "case" whose "history," as written, I have quoted. She complained of febrile action during part of the day, with pain in back and limbs, and thirst, the balance of the day being passed in comparative comfort. The tongue being a little coated, I did not hesitate to pronounce and prescribe for an intermittent. Within two days thereafter, I was notified that she was suffering from pain in right arm. Whether right or wrong in the first diagnosis, upon seeing her now, an

onslaught of rheumatism was unhesitatingly pronounced. Perhaps, however, the case was one of "Nephritis." For three days, remedies availed but little, although *Morphine* obtained insensibility to a considerable extent, much to the delight of the patient, as neither head nor stomach suffered from sequences. About that time, however, the inflammation abandoned the arm almost absolutely, but not the patient, as the *right hip* was forthwith assailed with terrible vehemence. (Does this bilateral feature belong to nephritis?) Now followed a condition I never saw with any other patient. She absolutely refused to be lifted for any purpose whatever. The left limb being movable, though all motion of lower limbs was painful, cloths were adjusted, as well as those caring for her could adjust them, to absorb the urine which was voided at intervals, and for a time, painlessly. Dejection was attended to in the same manner. Two days after the hip was assailed, micturition was painfully performed, the pain being upward to the region behind the pubes. During the second day after, the bladder became painful; it ceased to contract upon its contents, and I was obliged to use the catheter and repeat the operation several times during the next three days, when, though painful, the bladder resumed its propulsive functions. The urine was considerable in quantity, strongly acid, without blood and without albumen. The patient resisted the earnest importunities of the husband to remove her to another bed; but the odor becoming intolerable, I ordered her removed whether she consented or not. It was then I discovered the bed was saturated with urine where the nates had rested. I entertained serious apprehensions that the skin had become poisoned by the absorption of urine, and blamed myself that she had not sooner been forced from her bed. My fears were well based. Several obstinate ulcers formed upon the nates and the region just above. Now it was that she began to make outcries about her *back* as well as her *hips*, and as the latter became less sensitive during the progress of the "case," her *back* alone seemed to be the centre of distress; and it is to be noted that, whenever

requested to point out the exact location of the pain, she invariably referred to the inflamed nates and region just above. The ulcers healed under the bountiful application of *Glycerine* continued for a fortnight, and followed, toward the last of the healing process, by an unguent. To relieve the buttocks, which had become exceedingly tender from pressure, as she could lie on neither side, I improvised a ring made of cotton batting, to place them in, the region of the kidneys receiving an unwonted pressure. This secured comparative comfort, though I anticipated evil from the circular compression. After the ulcers healed, there was tenderness, swelling and hardness of the region inflamed. During this time the thigh had become swollen, and the swelling extended to the foot in the course of a few days. Bloody urine was now observed for the first time, but disappeared without special interference, to recur after the dropsy became general, and and again subside without special treatment. Urine was still somewhat acid, and now contained albumen, which increased steadily for some time, as did the alkalinity. The left foot now showed effusion, and the abdomen was distended. This did not become enormously distended as did the lower limbs. The face showed some puffiness, but not very considerable. The chest was also invaded, but gave no evidence of it by shortness of breathing till two months after the illness commenced. The hands were the last to become dropsical, and were least so of any part during my attendance. Nearly six weeks after she was confined to her bed, a large abscess ruptured just over the lower lumbar vertebræ. I confess to not having looked at the inflamed region for several days prior to the rupture, a piece of neglect not to be copied. After several days the discharge ceased, but the abscess re-formed within a fortnight, and I opened it, putting a tent in the orifice. The abscess soon ceased to discharge, but re-formed, and I opened it again just before I abandoned the case. A huge poultice was the dressing.

As might be supposed, the pulse ranged above a hundred during a whole month, and but little below that while under

my care, till toward the last, and then under the influence of *Veratrum*. In the earlier stages of the ailment the tongue became somewhat coated, and was redder than comported with safety. Before the abscess ruptured, her stomach became quite irritable, and for a few days I suspended all ingesta save aliment, and but little of that was taken. The dropsy then gained some headway. Soon, however, the irritation subsided, and the appetite became voracious. I indulged the demands of the palate and she overdid the thing, the stomach becoming intolerant of every thing. A few days of rest sufficed to restore the tone of the stomach; she ate with avidity and bore well the diuretics and cathartics now much needed to remove the effusion of the chest. They acted thoroughly, and the relief obtained was marked and permanent in the face, hands, chest and abdomen, though not complete when I abandoned the case. As the effusion diminished, a marked diminution of albumen was noticeable, and the urine slightly reddened litmus paper, but the acid reaction did not become decided while the case was mine.

I have neglected to say she had two attacks of what may be termed pleurodynia, after the chest was invaded by the effusion, the interval being several days, and *Morphine* was administered to relieve the pain, which it did effectually. She had but little headache throughout, but was much inclined to sleep after albuminuria was established; sometimes, 'tis true, under the influence of *Morphine*, but also, either from the toxic effect of urea, or from effusion within the cranium, or both.

Her strength was at no time as much diminished as might be supposed. She did some sewing and knitted several pairs of stockings during her illness, and I once found her at the table preparing vegetables for cooking.

When the arm was assailed, I put her upon the *Permanganate of Potassa* with negative results, and suspended it when the hips became involved, endeavoring then to saturate the system with *Citric acid*, lemons being allowed *ad libitum*. They finally disagreed with her. Indeed, the red tongue was

attributed to their agency. *Bicarbonate of soda* followed with negative results, unless it caused or increased the alkalinity of urine. From the commencement of the ulcerative process upon the nates, I kept her upon *Iron*, either the muriated tincture, or the phosphorated elixir, except when the stomach would tolerate nothing. Wine was used freely after debility ensued, and raw egg added to it three times a day till the egg became repugnant to her. *Quinine* was given liberally. Of that article she had a horror, as she was taking it when her arm was attacked, and she believed the *Quinine* produced the rheumatism. Her aliment I endeavored to have of the most nutritious kind. To relieve the dropsy, the changes were rung upon the diuretics, and to some extent upon the cathartics. Hydragogues, when breathing became difficult, were resorted to reluctantly, as I dreaded their effect upon the stomach; but the dyspnœa had to be relieved, so I took the chances, and won. It may be stated that peristaltic action of the bowels, during the most of the illness, was maintained with little encouraging success. The promptness with which the kidneys responded to the action of diuretics, without calling forth expressions of uneasiness from those organs, barred the presumption of the existence of active nephritis. Indeed, two weeks before I abandoned the case, I informed the husband of the probable recovery of his wife, provided granular degeneration of the kidney was not established. Of that, I told him time must determine, but I did not believe it existed. When I did abandon the case, the patient was vastly improved, save as to the abscess, and as I was firmly convinced it was connected with neither bone nor kidney, that it would finally and speedily close, I verily believed.

The prolonged illness of the patient abated no tittle of her amiability, and, having taken offence several times, finally, and unexpectedly to him, I told the husband he must get another physician, as I should not call again. This course, I was aware, left me open to just such a "history" as I have

quoted, but I took it deliberately, and am not disappointed over the "history of the case."

It is probable that nothing I did for the rheumatism itself was of any avail, nor the exhibition of opiates, which did attend sensibility. There may be some doubt as to the cause of the abscess. Such results do occasionally follow or accompany rheumatism; but I am strongly imbued with the idea that the circular compression of the ring, and the previous poisoning of the urine, had no tittle to do with it.

I do not think "the most remarkable feature (in the case) was the entire disappearance of albumen from the urine." Albuminous urine does occur, though rarely, in cases of rheumatic fever, and recoveries ensue, complete and permanent. Scarlet fever is not unusually followed by albuminuria, the quantity of albumen being sometimes very great, and yet recoveries, also complete and permanent, are not unfrequent, as every practitioner of even limited experience, knows. The whole case may be considered remarkable on account of its grave complications. The pain in the bladder was a new feature to me, in such a connection, but my researches led me to the conclusion that the muscular coat of the bladder is also subject to inflammation of rheumatic character. The invasion of that coat was as interesting to me as was the existence of albuminuria; because neither occur frequently in attacks of rheumatism, and both are to be regarded as interesting complications because of that infrequency, and because they added to the severity and prolongation of the "case." But "the most remarkable feature" connected with the case, is, in my opinion, the ridiculously absurd inaccuracy of the "history" I have quoted, so far as the early condition of the patient is concerned. The writer seems to have reached his conclusions from the most striking feature of the case when he first saw it, to-wit: the albuminous deposit. For it is difficult to believe that the patient, or her friends, would have concealed the important facts which I have communicated, had a searching interrogation been instituted. These random "histories" go a great way toward rendering medical litera-

ture uncertain and obscure, and they ought not to be *perpetuated.*

The "case" quoted can be found on page 530 of your issue, under date of August 15th, current year.

A. A. DUNN, M.D.

FOREIGN CORRESPONDENCE.

LONDON, ENGLAND, *August 12th*, 1868.

MY DEAR DOCTOR: I have endeavored quite a number of times, since I last saw you, to find time to write you a few lines, and some for the JOURNAL, in accordance with your suggestions before I left Chicago, but I have been moving so constantly that I have found it almost impossible. I landed at Queenstown, Ireland, on the 16th of June, and visited Cork and the Killarney Lakes, after which I went to Dublin, where I spent about two weeks most delightfully. I met Stokes, Sr. and Jr., Wilde, Hamilton, Banks, Beatty, Mapother and others. I was shown the professional, as well as other sights of the city—was wined and dined by them, both in town and at their country places, and was most hospitably treated every where by them. I attended the commencement exercises of the Dublin University (Trinity College), and visited most of the medical schools and hospitals, of which I will try to write you more hereafter. From Dublin I went to Belfast and the Giant's Causeway, and then to Glasgow, having been "ticketed" on by my Dublin friends and consigned to Dr. Gardiner of the Glasgow University, Dr. Cowan and Dr. Buchanan. I had a very pleasant visit of a few days there, and saw much of professional interest. From there I went to Oban, on the west coast of Scotland, and crossed through the Highlands, and visited Lochs Lomond and Katrine, the Trossachs, and passed on through Stirling to Edinburgh, where I

met Sir James Simpson, Syme, Hughes, Bennett, Watson, and quite a number of the other notabilities. I went with Bennett to the Edinburgh University, and saw his dogs, on which he was making his experiments, which seem to say that our ideas of the action of *Mercury* have not been correct. I spent about two weeks there most agreeably, and just missed Dr. Freer and Dr. Chas. G. Smith, who had been there a few days before. From there I returned to Glasgow, and spent a few days more, and then went to Liverpool, and spent a couple of days in looking up the sanitary matters of that city, which are admirably conducted, and their system of public baths and wash-houses is a credit to any city. I have examined that matter closely in all the cities I have visited, and Liverpool compares most favorably so far as I have seen. From there I went to Chester, to see a fair specimen of an old walled city. From there I came to London, and in the three weeks I spent here, I met Sir Wm. Ferguson, Erichsen, Bowman, Critchett, Solly, Spencer, Wells, Hutchinson, Sibson, Lawson, and saw most of them operate. I have visited Guy's, St. Bartholomew's, London, Charing Cross, Royal Ophthalmic, Westminster Ophthalmic, Southwark Ophthalmic, Royal Orthopædic, and quite a number of other hospitals, most of which have colleges, as you know, connected with them. I have made notes of most of the matters of interest, and if I can find time I will try soon to put some of them in shape for your journal. After making quite good use of the time I spent here, I went to Oxford to attend the meeting of the British Medical Association, to which I was a delegate, and which met on the 4th inst. Of this I will send you, herewith, a brief account, and I have sent, to Dr. Lyman, papers containing an account of most of the general order of the proceedings, and some of the works. I desire to preserve them, but if you desire to consult any of them he will place them at your disposal for the time being.

I start for Paris to-morrow, where I shall remain a short time, and be in Heidelberg on the 3rd, 4th and 5th of September at the Congress of the Ophthalmia men of Europe,

where, it is expected, Graefe, Donders, Stellwag, Arlt, Critchett and others will be. After that I expect to go to Berlin, Dresden and Vienna, and if, in the meantime, I can catch a few spare hours, I will try to place the result of them at your disposal. I should be glad to hear from you at any time. Address me—Care of Norton & Co., Bankers, 14 Rue Auber, Paris. They will forward any letters for me. Hoping to see you in a few months, and with kind remembrances to all friends, I remain very truly yours,

SAMUEL J. JONES.

The thirty-sixth annual meeting of the British Medical Association occurred at Oxford, on the 4th of August, and was organized by Professor Stokes, of Trinity College, Dublin, the President of the Association for the past year.

In accordance with the custom of the Association, after organizing the meeting, the President delivers a valedictory address and resigns the chair to the President elect, who delivers an inaugural address, which duty this year devolved upon Professor Ackland of the University of Oxford. This generally completes the work of the first day. The next day generally begins the real work of the meeting. The arrangements for the general meetings of the entire Association, and for the different sections of medicine, surgery, obstetrics, etc., are made, and assignment is made to each of its proper share of work. The delegates from other Medical Associations are then admitted. The American Medical Association was this year represented by Dr. S. D. Gross and Dr. H. E. Goodman, of Philadelphia. Dr. Fordyce Barker, of New York, and Dr. S. J. Jones, of Chicago, as delegates to the Oxford Meeting.

During the general meetings of the Association addresses were delivered by Professor Rolleston, of the University of Oxford, on Physiology; by Dr. Gull, of London, on Medicine, its present status, etc.; by Professor Haughton of Trinity College, Dublin, "Sources of vital and mechanical force derived from food, and its influence on medical practice," and by Professor Bennett, of the Edinburgh University, on the

action of mercury. The latter address was accompanied by tables showing the result of a series of experiments (upon dogs, in which biliary fistula had been made, under Professor Bennett's direction), which are adduced as evidence that mercury does not increase the secretion of bile. The recognized position of the author of the address, the apparent care with which the experiments were conducted, and the importance of the questions entitle the subject to consideration, and lead us to hope that something satisfactory may result from the experiments to be continued.

The report of the Joint Committee of the British Medical and Social Science Associations on Public Medicine, appointed last year, was presented in the general meeting, and various subjects bearing upon the advancement of the medical profession, and regarding sanitary science were considered. In medical education, the same difficulties are experienced, and the same questions agitate the teachers, and interest the profession at large, in Great Britain, that have received so much attention in the United States, as to how the standard shall be elevated, and the proper protection secured for both practitioner and the public. Much is hoped for here from the establishment of the British Council of Medical Education, the only legal Medical Association of Great Britain.

The President's soiree was given at the Museum of the University, and afforded all an opportunity of examining that, and the "Annual Museum" of the Medical Association, which was inaugurated this year, and opened for the session in the building of the University Museum. It is a beginning of what promises to be an interesting feature of the annual meetings, and is one worthy of the consideration of the American Medical Association. The design is to show the advancement made in the profession from year to year by annually collecting together during the session, wherever it may occur, of new surgical instruments, interesting pathological specimens, valuable new medical works, etc., etc. Prominent among the latter, this year, were the works issued from the Surgeon General's office of the U. S. Army, and the

flattering and frequent allusions made during the meeting to the American contributions to medicine and surgery were very gratifying. Before adjournment, the appointment of a deputation to attend the next meeting of the American Medical Association was authorized—their first delegates to that association.

The work of the sections is arranged much in the same manner as that of the American Association, the organization of the two associations being almost identical. A printed daily bulletin is issued here, stating the work of the different sections for the day, in addition to matters of general interest, which, if imitated by our own association, would prove a convenience to the members.

In the surgical section, much of interest was presented, though comparatively little that was new. The subject of torsion as a hæmostatic means received considerable attention. The results of quite extended experiments were given, and seemed to indicate that in medium and small size arteries it is reliable and valuable, but could scarcely be considered so in large vessels. Acupressure was not specially considered. On the subject of the value of carbolic acid in surgery, much difference of opinion was manifested as to the range of its applicability.

One of the most ingenious apparatuses presented at the meeting was by Dr. Adams, of Maidstone, England. It is an instrument which he has devised for measuring the field of vision, which seems to be very reliable, and if so, will prove a valuable aid to ophthalmic surgeons, in supplying what has long been needed. It consists of a glass hemisphere, supported on an iron rod, with a slide to accommodate it to the height of the patient's eye. The eye of the surgeon is opposite that of the patient, who can thus see if the patient changes his eye in marking the field of vision, which is done by noting with a piece of soap on the glass hemisphere the limit of vision. The hemisphere is divided into meridians of longitude and parallells of latitude, and by having a similar diagram drawn on a small scale on paper, a convenient mode of recording the case for future use is afforded.

Many other matters of professional interest were presented in the different sections, but comparatively little that was new. Before adjourning, the annual elections took place, and Leeds, England, was decided upon for the next meeting, and in compliance with a rule of the Association, which requires that the President for the following year shall be from the district in which the meeting is to be held, Dr. Chadwick, of Leeds, was chosen as the presiding officer for the next term.

PHILADELPHIA CORRESPONDENCE.

PHILADELPHIA, *Sept.* 18, 1868.

Editor CHICAGO MEDICAL JOURNAL:

The tendency towards *speciality* in our profession is daily increasing. Young men, of enlarged views and intelligent minds, are graduated from our colleges, and enter upon a *special* field of work at once. Notwithstanding the ridicule that has been thrown out, or *attempted* to be thrown out, against this class of our profession, it is, nevertheless, an indisputable and recognized fact that the idea is becoming a fashionable one.

Fashion is just as much a tyrant in medicine as it is in the tailor establishment of our modern dandy, or the elegant dress emporium of our *elite* females. And this is not new or utopian. Several years ago, the late Professor Green, of New York, astounded the world by his proclamation of his treatment for throat and even chest affections. Immediately throat affections became *fashionable*, and thousands of mouths were opened to have the *swab* pushed down the throat. Louis XIV. was a sufferer with anal fistula, and in France this disease became at once so fashionable that surgeons were busy with cutting for this alone; "those who had only a *small draining* run immediately, and *turned up their posteriors*." In 1840 and '41, when Dupuytren's operation for relaxation of the sphincter ani was in vogue, it became popular

in this country, especially in New York, where *every thing* is in excess, and it is said the result was that "New York anuses looked like *gimlet holes in a piece of pork.*" And fashion *still* holds a powerful sway in our profession, but whilst we are embracing specialities more largely than heretofore, we are doing so with more discretion and intelligence. There is, too, that cordial and genial feeling entertained by the profession, as a class, towards specialists which is so impressively becoming to the fraternity. And this feeling is growing warmer and more extended every day. My object in these few prefatory remarks is to bring into notice that speciality which is becoming so popular among us now, and which, perhaps, of all others, is the object of the most uncharitable remark. I mean that of uterine diseases. Dr. Buck, of New Hampshire, two years ago, in an address before the medical society of that State, devotes about two pages in the printed matter, to the ridicule of these diseases. My purpose is to occupy a few pages of your journal in a series of two or three letters, illustrating, by cases, accurately and concisely given, the great prevalence of uterine diseases, and the value and importance of devoting *special* attention to them. To show, if possible, that the "*raid* being made upon the uterus at this time" is in the hands of intelligence, the means of averting much distress, and relieving much suffering, and to show that this "harmless, *inoffensive* little organ, stowed away in a quiet place," when *roused*, is the means of wrecking life, making pleasure a burden, and arresting, to an alarming extent, the furtherance of the race. And if proper treatment in this direction is observed, and these results *can* occur, it is *good* that there are those who "mount a speculum."

In my next letter I shall notice uterine disease *in general*, its unprecedented prevalence, its causes and its tendency. In letters No. 3 and 4 some notes will be made of special uterine diseases, together with some remarks on their treatment. As far as I can, I shall illustrate my subject with interesting cases.

E. K. Hutchins.

EDITORIAL.

☞ Circumstances, over which we had no control, have delayed the present number a few days. We shall be up to time again at our next issue. Owing to the pressure upon our space, foreign items are necessarily postponed until next number.

Attention is especially directed to the exhaustive essay on the pathogenesis of disseminated chronic pneumonia and of pulmonary tubercles, by PROF. LEBERT, now passing through our pages. The name of its illustrious author is sufficient to vouch for its entire reliability. The conclusion will be given within the subsequent or next ensuing issue. It alone, we feel warranted in saying, is worth more to the thinking practitioner, than a year's subscription price of the JOURNAL.

Atomizing Apparatus.

Codman & Shurtleff have furnished for experiment a specimen of their improved atomizing apparatus. It is fitted either for the purposes of local medication or refrigeration. A glass protecting funnel is added, which can be removed at pleasure, making the whole exceedingly compact and convenient. For sale by Bliss and Sharp, 144 Lake Street.

U. S. Marine Hospital at Chicago.

The report of the accomplished special agent and medical inspector of Marine Hospitals, W. D. STEWART, M.D., on the inspection of our Marine Hospital, is very complimentary to Surgeon Rogers, who has it in charge. This was to have been expected by all who know Dr. R. The only objection to him is he *won't* get married and thus *perpetuate those like him.*

Honorary Degrees.

When the Western and Nashville Journals get through their *unwilling* noddles the idea that HONORARY DEGREES have, from time immemorial, been conferred upon those who have especially distinguished themselves in medicine, as writers, discoverers or practitioners, it will be time enough to reply to their discreditable slurs upon certain gentlemen who have recently been selected as recipients of this honor by "a certain medical college." The fact of previous graduation or non-graduation, of course, has nothing to do with it.

Our Amiable Contemporary out West will receive suitable attention soon.

"*What's in a Name?*" An article under this heading is on file for insertion soon.

BOOKS RECEIVED.

CRIMINAL ABORTION: Its Nature, Its Treatment, and Its Law. By Horatio R. Storer, M.D., LL.B., etc., etc., and Franklin Fiske Heard. Boston: Little, Brown and Company. 1868. Pp. 215.

VESICO-VAGINAL FISTULA, From Parturition and Other Causes; With Cases of Recto-Vaginal Fistula. By Thomas Addis Emmet, M.D., Surgeon-in-chief of the New York State Woman's Hospital, etc., etc. New York: William Wood and Company. 1868. Pp. 250.

ON DISEASES PECULIAR TO WOMEN; Including Displacements of the Uterus. By Hugh L. Hodge, M.D., Emeritus Professor of Obstetrics and Diseases of Women and Children, in the University of Pennsylvania. *Nullius addictus jurare in verba magistri.* With Illustrations. Second Edition, revised and enlarged. Philadelphia: Henry C. Lea. 1868. Pp. 531.

ATLAS OF VENEREAL DISEASES. By A. Cullerier, Surgeon, etc., etc., Paris. Translated by Freeman J. Bumstead, M.D., Professor, etc. Part IV. Philadelphia: Henry C. Lea. 1868.

TRANSACTIONS of the Medical Society of the State of Pennsylvania. Nineteenth Annual Session. 1868.

TRANSACTIONS of the Indiana State Medical Society. Eighteenth Annual Session. 1868.

OVARIOTOMY: A Paper read before the Ohio Med. Soc., Session 1868. By Alex. Dunlap, A.M., M.D., Springfield, Ohio.

TRANSACTIONS of the American Dental Association. Fifth Annual Meeting, held in Chicago, July 25th to July 28th, inclusive, 1865; and Sixth Annual Meeting, held in Boston, July 31st to August 7th, inclusive, 1866. Boston: Alfred Mudge and Company, 34 School street. 1868. Pp. 511.

CLINICAL LECTURES ON DISEASES OF THE EYE AND EAR, AT THE CHICAGO CHARITABLE EYE AND EAR INFIRMARY.

The Sixth Course of Clinical Lectures at the Infirmary (16 East Pearson street), by Dr. E. L. Holmes, will commence October 5th, at half-past one o'clock, P.M., and continue twenty weeks, on such days and at such hours as may be found most convenient to those who attend.

No Institution in the Northwest offers the student and practitioner superior opportunities for the clinical study of all forms of ophthalmic diseases and their medical and surgical treatment.

During the past year, more than 800 patients have received the benefits of the institution, of whom a large number required important surgical operations on the eye.

During the last course, there was an average daily attendance of 40 patients at the Infirmary.

Excellent opportunities will be afforded of studying each case, and comparing it with other cases. The abnormal condition of the various tissues of the eye will be illustrated, not only by the cases under treatment, but also by numerous plates, and by a large number of pathological specimens. Instruction will also be given in the use of the ophthalmoscope, and in the best modes of examining the ear.

Certificates of attendance will be given to the members of the class, at the close of the course.

Tickets for the course will be $5.00 each. The fees will be devoted to the support of the Infirmary.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—OCTOBER 1, 1868.—*No.* 19.

PATHOGENESIS.

The Pathological Anatomy and Pathogenesis of Disseminated Chronic Pneumonia, and of Pulmonary Tubercles. By H. LEBERT, *Professor of Clinical Medicine of the University of Breslau.*

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(*Continued from p.* 597.)

2*nd. Pathogeneses of chronic disseminated pneumonia and of tuberculosis.*

In casting a rapid glance over the historical development of the doctrines of tuberculosis, we find, up to the beginning of this century, an extreme confusion of ideas, and the term phthisis, which, until to-day has preserved its parasitic existence in science, was applied to the most diverse pulmonary affections.

Bayle and Laennec first associated all the alterations of the pulmonary tissue, in regarding them as originating from tubercles, and from their different phases of development. They thus introduced into science, for more than half a century, this strange confusion, prevailing even now among many pathologists, which associates in the same morbid entity pneu-

monic foci and true tubercles. From this epoch Broussais defended, with energy, a totally opposite doctrine. According to him these alterations are only inflammatory, and originate from the pulmonary capillaries, and principally from the lymphatics; but his descriptions were so inexact that his general views of inflammation, stamped as they were with the impress of genius, could rally around him but a small faction, although reckoning in this number some men of true talent.

Louis described the anatomical alterations and symptoms of pulmonary phthisis with such exactness that, whatever may be the changes of doctrine, his descriptions remain, and will ever remain, true. He takes, also, for point of departure, the tuberculous unity of Laennec. Cruveilhier and Bouillaud maintain, on their side, the inflammatory nature of all these affections, and Andral approximates nearly to them. The authors whom we have just cited base their doctrines upon a thorough knowledge of morbid anatomy; however, in spite of their high authority, the doctrine of tuberculous unity controls the schools. As to the structure of tubercle, some believe it amorphous, others consider it to be formed of inspissated pus. I have already stated that I have demonstrated, since 1844, whatever was erroneous in these two opinions, in reference to true tubercle, but during a long time I myself confounded with tubercle inflammatory products originating from connective issues, or from epithelium, whilst recognizing thoroughly the frequent combination of tubercle with phlegmasia. In 1850 Reinhardt revived the exclusive inflammatory doctrines, and endeavored to base it upon carefully made anatomical and microscopical studies; but two years later Virchow sought to rectify whatever was exaggerated in this method of examination, and separated true tubercle from chronic pneumonia, an opinion which he maintains still in his excellent work upon tumors, designating chronic pneumonia as scrofulous, and tubercle as lymphoid neoplasma.

Villemin, in an excellent treatise upon tubercle, supports the doctrines of Virchow by new investigations, exact and well made, and in 1865, he conceived the happy idea of

inoculating and transmitting tubercle from men to animals, believing that to be able to re-establish the specific nature of tubercle, after histology had been compelled to abandon it.

Distinguished observers, such as L. Meyer, E. Wagner, O. Weber, Colberg, among the Germans; Martel, Vulpian, Hérard and Cornil, etc., among the French, adopted, with slight modification, nearly these views. Already, previously, Robin had insisted upon the connective element of tubercle, and had thus precluded the demonstration of the formation of tubercle, by proliferation of cells of the connective tissue. If the French authors have followed the impulse given in Germany, and especially by Virchow, they have, in their turn, been the first to draw a clinical advantage from these anatomical doctrines. It is thus that Hirtz, Chatain, Coursiers, Feltz, and others, have sought to establish the differential diagnosis between chronic pneumonia and pulmonary tubercles.

It is in this sense, also, that Niemeyer (of Tübingen) has asserted himself in a series of lectures, full of interest, and very well written, published, in the course of the last winter, in the *Weekly Clinical Journal*, of Berlin. On the other hand, Hérard and Cornil return rather to the old unity (theory) of Laennec, whilst describing very well the different forms of these diseases. They insist upon the intimate relations which unite chronic pneumonia and tubercles, attributing to these latter the principal part. They are right in this regard, that the characters of the differential diagnosis indicated up to this time, have not by any means all the value which has been attributed to them. Moreover, let us not prejudge, in this relation, the future of science, which is actually in process of transformation. The opinion at which I have arrived up to this time, and which I shall endeavor to justify elsewhere, and in a manner as complete as possible, is that in the chronic pulmonary maladies, reputed tuberculous, disseminated pneumonia predominates in such a manner that almost all that has been said of chronic phthisis is applicable to it, especially when one considers the changes which are effected therein when true tubercles are superadded thereto.

On the other hand, all that has been written concerning acute phthisis, applies essentially and by preference to acute and sub-acute pulmonary tuberculization, whether primitive or consecutive.

Before proceeding further, I desire to formulate into certain aphorisms, the pathogenetic results to which my investigations have thus far conducted me:

1st. Disseminated chronic pneumonia preponderates in the field, formerly so extended, of chronic pulmonary tuberculization.

2nd. I find no sufficient reasons for designating disseminated chronic pneumonia as scrofulous.

3rd. True tubercle offers, indeed, some characteristics of a product of new formation: however, its structure is so analogous to an inflammatory non-purulent cellular proliferation, that the doubtful question between its neo-plastic or inflammatory nature, inclines, in my opinion, strongly in favor of the inflammatory nature even of true tubercle.

4th. Tubercle is much more frequently the consequence, probably even the product of disseminated chronic pneumonia, than its cause. It is even probable that tuberculous granulation is frequently only an inflammatory metastasis, originating from inflection resulting from the inflammatory product of chronic pneumonia.

5th. This tuberculous granulation, probably inflammatory, in an anatomical point of view, constitutes, however, as a morbid element, a special affection different from simple inflammation.

6th. True tubercle is transmissible, from men to animals, by inoculation, or subcutaneous injection; but further investigation is necessary in order to know if tubercle alone is capable of determining multiple and inflammatory foci, which indeed have a great analogy with the tubercle of man, from which they take their origin. In expressing this doubt I base it upon experiments not yet concluded which I shall finish hereafter.

7th. True primitive tubercle is much more rare in the lungs

than primitive disseminated chronic pneumonia; however, it predominates in afflictions of this sort of acute or subacute progress, and accelerates that of chronic pneumonia, when it is superadded thereto in its course.

8th. The very frequent coincidence of tuberculous, and especially old, inflammatory foci, with an acute tuberculization, speaks in favor of the hypothesis of the frequent metastatic and infectious nature of tubercle in its relation to inflammation, or to old tuberculization.

It is impossible to doubt the frequency of foci of chronic disseminated pneumonia, whose extreme frequency has been determined in the fact that it is called chronic tuberculization.

They have no specific characteristics, and if they occur in a constitution otherwise good, they may be cured, but to become subsequently points of departure of new pneumonic foci, or of acute tubercles.

Foci scattered and minute constitute frequently the form which is observed in strong and well constituted individuals. Nor is it less frequent that individuals, of previously feeble health, having become strong and well nourished subsequently, exhibit old relics of these diseases in the lungs and in the lymphatic glands. Whenever, in these cases, there may supervene a debilitating and prolonged disease, a chronic suppuration, a purulent pleurisy, a severe syphilitic infection, a prolonged dyspepsia, an obstinate diarrhœa, mental depression or protracted cases, these germs, slumbering, as it were, may awaken anew and originate serious and even fatal disease, either subacute tuberculization or chronic pneumonia.

As a general proposition, this last is most frequently connected with debility, either primitive or acquired, long and exhausting diseases. The hereditary proclivity so frequent amongst the sick, is probably based upon congenital weakness of the pulmonary tissue, and at an early period among such, one is struck by the chest, flat and narrow, especially in its superior strait, to which deformity rachitism does not appropriately predispose it. These disseminated foci once established exhibit a slow progress, the inflammatory products

undergo a species of cellular death, with a dry, yellow, shriveled condition, or a destructive disintegration with an invasion of ulcerative molecular necrosis.

There results from these deposits, in addition to respiratory embarrassment and cough, a low fever, as well as progressive diminution of strength and rotundity. Inhalation of irritating mechanical particles is much more immediately injurious with this primitive morbid disposition than with a vigorous constitution; nevertheless, the pulmonary tissue having been once debilitated by prolonged catarrh, these injurious particles reach the air cells and penetrate therein, and it is then that their injurious effects are manifested more and more. Let us call to mind anew at this point, that disseminated chronic pneumonia, whether hereditary or acquired, or of mechanical origin, may attack as well the interstitial and peribronchial cellular tissue, as the air cells, which fact induces me to consider the expression chronic catarrhal pneumonia more correct than epithelial. I have already stated that I no longer admit the term scrofulous pneumonia, and I will also add that the chronic inflammations of infancy which simultaneously or successively have their location in the skin, in the subcutaneous cellular tissue, in the organs of the senses, upon the mucous membranes, in the periosteum, the bones, the articulations, with products as well plastic as suppurative or destructive, can not in my opinion be identical either with true glandular tubercles, or with the infiltration with tuberculous appearance of the superficial lymphatic glands. Nor do I any longer admit that lymph of bad quality can be the ordinary cause of these glandular alterations, since I have very frequently seen them exist without traces of anterior or concomitant irritation in the head, the body, or the organs of sense. Moreover, in the immense majority of cases of chronic disseminated pneumonia, I have observed, especially in the adult, this superficial infiltration or glandular tuberculization had not existed previously to, and did not co-exist with the pneumonia foci. Nothing, therefore, appears to authorize me to regard or even to call scrofulous these chronic foci of

pneumonia. However, I should go too far to deny the possibility of their coincidence, of their etiological influence in a certain number of cases. It is not only against the exaggeration, the generalization of this fact, that I protest. I would not even desire to designate dyscrasia as the cause of these chronic pulmonary phlegmasiæ, especially if the term dyscrasia implies a bad quality of blood. This is the most changeable fluid of the economy; ever renewed, ever transformed, it is essentially transitory in its nature, and consequently one can not admit the prolonged residence, latent during years, of an hereditary morbid germ in this fluid.

We have already endeavored to demonstrate that true tubercle could indeed originate spontaneously, but that it was so often consecutive to anterior pneumonic foci, that involuntarily we came to regard it as their secondary infectious and metastatic product.

This opinion is not new. Dittrick* had already asserted that the tuberculous dyscrasia commenced with the arrival in the blood of the products of decomposition, especially inflammatory, in process of retrograde metamorphosis. Virchow adds, in referring to this mode of consideration, that in fact, after prolonged local diseases, and in the protracted phases of phlegmasiæ of slow resolution, tuberculosis may appear rapidly. Bahl† finally maintains the same mode of viewing the fact that necrosed particles of tissue may be transformed into tuberculous matter, and provoke, by absorption, miliary tuberculization.

We here arrive at an important point, but still disputed, the question of the specificity of tubercle. It is known that its structure does not imply it, and its partizans had become few, when the investigations of Villemin imparted to it a new impetus. In twenty-four experiments he has succeeded twenty-two times in rendering animals tuberculous. Amongst the first, I have repeated his experiments and have confirmed them; the same is true of Hirard and Cornil, who added two

* Virchow, Krankraft Geschwaelstez, Vol. II. p. 631.

† Zeitschroft für rationelle medicin, 1857, Newa Folge, Band. VII.

failures with chronic pneumonia. A year and a half ago, I made, with Dr. Wyss, numerous experiments upon this subject by inoculating, beside tubercle, every other species of morbid products, and by provoking, in other experiments, various irritations of the pulmonary tissue. I will not anticipate the results of these experiments which are not yet completed; but at the outset the successful inoculation of tubercle appeared to me to testify in favor of its specificity. New doubts have occurred to me since I have subsequently seen that lymphatic glands infiltrated with a thick tuberculiform matter, which Virchow and Villemin regard as of inflammatory origin, have equally produced, by inoculation, semi-transparent miliary tubercles. On the other hand, we have likewise seen granulations of tuberculous appearance originate by inoculation of all other substances than tubercle. Moreover, the structure of these products of inoculation had as much the character of a proliferation of the cells of connective tissue, as of those of epithelium, and in addition, accompanying the semi-transparent granular tubercle, we have established, in consequence of the inoculation, a yellowish hyperplastic infiltration diffused through many of the lymphatic glands, and in one case, in the the liver of a rabbit; besides tuberculous granulations, a diffuse hyperplasia of the interstitial connective tissue, such as is observed in incipient cirrhosis.

Hence there arises a double question, to my mind doubtful: that of the speciality of tubercle, and that of its inflammatory nature, which, after all my observations, appears to me probable. A fact which sustains this, is that sometimes in the midst of chronic pneumonia of interstitial and connective tissue, we meet with little grayish granulations, which are nothing else than a proliferation more dense and more circumscribed of the cells of the connective tissue in the midst of a diffuse hyperplasia. Indeed these same granulations entirely isolated, could not be distinguished, under the microscope, from true tubercle.

Observations which could be made upon serous membranes,

especially upon the pleura and peritoneum, which Wagner has confirmed in case of the liver, and which Dr. Ebstein, according to an oral communication, in that of tubercular granulations of the heart, demonstrate around minute tubercles numerous very small foci, altogether microscopic of cells of connective tissue in process of multiplication. Now, these little hyperplastic foci resemble greatly those which are provoked in the cornea when its center, removed from all blood vessels, is irritated; nevertheless, one is compelled to admit this process occurring in the cornea to be inflammatory.

I have already suggested the resemblance which exists between the tuberculous granulation and that incipient not yet suppurative, of glanders, as well as with that of syphilitic gummata. It is exactly the gummy tissue which, as well as the tubercle, exhibits all the phases between the irritative process in the connective tissue, and the little tumor, apparently of new formation. I figured, some years ago, gummy tumors of the skin, of the heart, of the uterus, and of the ovaries, amongst which those of the skin exhibited the diffuse aspect and the microscopic elements of the inflammatory process, whilst the gummata of the heart and of the internal genital organs had the dull yellow aspect, and the same little shriveled cell apparent in the yellow tubercle in process of cell-necrosis, and exhibited the limitation of the tumors. When gummy tumors have been seen a certain number of times, it is easy to determine what Virchow has so well described, that there exists around some of these gummata a purely inflammatory cortical layer, vascular, composed of young connective cells, whilst towards the interior is found an infiltration of a dull yellow, tending toward disintegration, and the facility with which suppuration is established in these tumors is well known.

A fact which militates in favor of the inflammatory nature of gummata, is, that I have encountered in the muscles and in the brain, gummy infiltrations, altogether diffused, not presenting in any manner the sharply defined limits of tumors. The analogy of tubercle with inflammatory products finds

again support in the essentially transitory character, and in the tendency to disintegration, to cellular death of true tubercle. Since even when large collections of granulations form considerable masses, as in the brain, for example, there is perceptible alongside of the irritative and hyperplastic process on the surface of the disintegrating mass, softening, fatty alteration, in proportion as they advance from the center or approach older tubercles.

Does the probably inflammatory nature of tubercle exclude it from the possession of special, not to say specific characteristics? I think not; for many infectious or contagious maladies, such as blennorrhagia, urethritis, syphilis, glanders, the small pox virus, are evidently inflammatory as regards the local disease, and yet contain an inoculable principle. It should be distinctly understood that from debilitating etiological elements a certain weakness of structure gives origin to a local irritative hyperplastic process, and consequently, those who fear new doctrines who might be designated *neophobes*, may be re-assured about the treatment of these diseases, when the limits of the inflammations extend themselves, and when the inflammatory character of all that which is to-day designated acute or chronic tubercle is established. Let those equally who behind these doctrines see the spectre of vampirism, re-assure themselves also. An irritable condition which so frequently originates from debility of the tissues or of the entire body, could only under exceptional circumstances justify antiphlogistic treatment. But on the one hand, the clearest appreciation of these morbid products, and of their locally irritable nature would have this good result, to put a curb upon the abuse of exciting methods of treatment, and of a too abundant and too analeptic regimen in diseases in which the perfect condition of the general nutrition should preoccupy the practitioner, but without leading him into exaggeration. I would add, finally, that the more carefully the nature of these pulmonary diseases shall be studied, the earlier will they be recognized, and more truly rational and salutary will their medical treatment become.

ELIXIRS OF CALISAYA AND CALISAYA AND IRON.

BY X. TONER, M.D., ALBANY, NEW YORK.

THE Cinchonia barks are obtained from trees, or tall shrubs, which are found only in South America, in the higher regions of the Andes. The Cinchonas belong to the natural order *Cinchonaceæ* and to *Pentandria Monogynia* of Linnæus. Their virtues are reported to have been discovered by the Indians, about the year 1500. The story is, that an Indian, while sick of the fever, drank of the waters of a lake in Peru, and soon recovered; and that subsequently so many were cured by the same means when afflicted similarly, that the water came to be regarded in the light of a fever panacea. On investigation, it was found the water owed its healing powers to the bark of these trees, which had been torn up in great abundance by an earthquake, and fallen into it.

Various appellations, from time to time, have been assigned to the Cinchona tribe, in honor of the individuals who introduced it into their respective countries, or sold it as a secret nostrum. Introduced into Europe by the Jesuits it was called *Jesuits' Bark, or Powder;* brought to Rome by a Cardinal, after him it received the epithet *Cardinal del Lugo's Powder;* while in France it might have been heard of as *Talbor's Powders* and *English Remedy*, on account of its eminently successful employment as a nostrum in the hands of Sir Robert Talbor. But the systematic designation Cinchona was applied to the genus of trees producing it by Linnæus, in 1742, in honor of the Spanish Viceroy's lady, the Countess de Chinchon, who was cured of fever by it in Lima, abont 1638. She was among the first to test its febrifuge virtues.

The officinal Peruvian barks are *Cinchona flava, Cinchona palladi*, and *Cinchona rubra.* Their proximate principles or constituents are numerous, but the most important are *quinia, cinchonia, quinoidia*, and *quinidia*, which exist in combination with kinic and red cincho-tanic acids.

The yellow bark is very bitter, almost free from astringency, and is comparatively rich in quinia. According to analysis (Waring), one hundred grains of the crude material should yield not less than two grains of this alkaloid. The chief active principle of the pale bark is cinchonine. Two hundred grains should yield not less than two grains of alkaloids. The red bark possesses quinine and cinchonine in about equal proportions; one hundred grains should yield not less than two grains of alkaloids.

All the varieties possess tonic, astringent, and antiperiodic properties, and are of all medicines of their class, the most powerful and uniform in their action. Their medicinal utility depends upon the proportion in which the alkaloids are present in them. As the calisaya cinchona contains the greatest quantity of quinia, and the least amount of the astringent principle, this species receives the most favor with physicians as an antiperiodic and tonic.

The action or mode of action of the calisaya is similar to the action on the animal system of either of the other varieties, whether in its tonic, antiperiodic or sedative action. Its action upon the nervous system is often evinced by a sense of tension, of fullness, or slight pain in the head, or singing in the head, which are always experienced by many individuals, when brought completely under its influence. In the system generally it acts in some way which we don't fully understand, correcting those influences which are probably at work during the respective stages of intermission. In the stomach, the bark excites in a short time warmth in the epigastrium, which in some becomes communicated to the neighboring parts.

Though possessing a three-fold power, bark owes its world-wide reputation to its antiperiodic property; yet it is not employed in the "intermittents" alone. It may be used with benefit in all morbid conditions of the system, whatever may be the peculiar modifications, in which a permanent corroborant effect is desirable, provided the stomach be in a proper state for its reception.

The physician, contending as he frequently has to do, in the peculiar class of cases to which this drug adapts itself, with

stomachs easily revolted by the grosser and bulkier medicines, meets with insurmountable objections in the crude material; objections, too, which have thrown many a valuable instrument to combat disease into disuse, practically. 1st. The bark is intensely bitter. This property renders it, *per se*, obnoxious to most patients. 2nd. The dose required to be given in order to produce the desired effect is *enormous*, giving rise, sometimes, to painful and intractable disturbances of the digestive apparatus. As a tonic, the advised dose is from *thirty* to *sixty* grains; as an antiperiodic, the quantity, necessary to prevent the return of the paroxysms, varies from *one* to *eight* drachms, according to whether the attack is simple or pernicious, whether the patient is treated in or at a distance from a miasmatic locality.

These objections have led the profession, through Pharmaceutists, to reduce it to a concentrated and palatable remedy, which comes to us from the manipulations and processes of the laboratory in the form of an elixir. The *Elixir of Calisaya*, as prepared by Tilden & Co., Pharmaceutists, New Lebanon, N. Y., is certainly an elegant medicine, a tonic of paramount excellence. So far as our observation extends, it has the confidence of the profession, and deservedly so. In all the diseases and complaints in which the crude calisaya is beneficial, the elixir proves an agreeable tonic, invigorating the system, improving the appetite, and restoring strength to the weak and debilitated. In low or typhoid forms of disease, in which no inflammation exists, or that which does exist has been moderated by proper remedies, or passed into the suppurative stage, this drug is often of the greatest advantage in supporting the system till the morbid action ceases. Hence its use in the latter stages of typhus gravior, in malignant scarlatina, measles, small-pox; in carbuncles and gangrenous erysipelas, and in all cases in which the system is exhausted under large purulent discharges, and the tendency of the affection is toward recovery. As a tonic there is hardly a disease or complaint connected with debility in which this elixir may not be employed with advantage. No better tonic

is recommended in scrofula, dropsy, in obstinate cutaneous affections, chorea, and certain forms of dyspepsia — invigorating the system, improving the appetite, and restoring strength to the weak and debilitated. The strength of the preparation made by Tilden & Co., contains forty grains of the bark to the ounce. Were we called upon to recommend a vegetable tonic, we should unhesitatingly commend to all physicians the *Elixir of Calisaya* prepared by the above named pharmaceutists. We have used it in our own practice with uniformly gratifying results, having never known it to disappoint.

The *Elixir of Calisaya* and *Iron* is another eminently excellent tonic. It is prepared by the same house, and contains in every fluid ounce thirty grains of calisaya and twelve grains of iron. The iron which enters into this preparation is the hypophosphate, acceptable to the most delicate stomach, easily assimilated, and has no tendency to pervert the intestinal secretions, whtch is the result of most chalybeates. It is particularly beneficial in nearly every case of debility partaking of the anæmic condition, in leucocythemia when there is a deficiency of hæmatine in the blood corpuscles. In many cases of defective osseous formation and nervous degeneration, no more available adjuvant has been suggested.

Words seem too tame to adequately portray the advantages these two valuable preparations possess over the crude materials. We are confident when once the physician uses these elixirs, he will never think his medical Armentarium complete without them.

A CASE OF APOPLEXY.

BY CURTIS T. FENN, M.D., CHICAGO.

The following is the history of a case of apoplexy which I witnessed from the moment of attack. The subject, aged sixty-one years, was a native and resident of Vermont, once a man of apparently good constitution, thick set, rather

fleshy, a farmer, married, without children, of laborious habits, a hearty eater, given to the habitual use, though not abuse, of hard cider. Apprehension that his health was failing, induced him to resign all care two years ago. The pursuits of a large farm had never satisfied him; but at this time he grew quite restless. He acquired a belief that his heart was diseased, and that he might die suddenly. This increased his unhappiness. Feeling the need of more cheerful surroundings, he went abroad, but returned in a few months more than ever depressed. He experienced fatigue on slight exertion; his pulse was uniformly too rapid; and his heart's action often tumultuous; his breathing was short; his lungs inclined to fill up. He had no pain; he thought his mind as comprehensive and clear as ever; his vision and hearing were good; he invariably slept well — too well he thought; his appetite remained excellent; his bowels regular. He was annoyed by thirst, desiring to drink immoderately of water, but from this he refrained; his urine was of proper quantity and color; he perspired easily; his extremities were apt to become cold; his face was sometimes flushed, and at other times pale; occasionally he took opium in small quantity, which made him "feel *stronger* and *happier — it relieved his heart.*"

I learned these facts from him about noon, June 9, 1868. At the same time the area of the heart's dullness was ascertained to be greatest in its transverse direction; the apex beat feebly, and felt over two or three intercostal spaces, extending to the left of its normal place; the pulse was rapid, soft, and full, 108 per minute; half an hour later it had fallen to 101; the sounds of the heart were indistinct and short, seeming to unite in the first sound, which had the character of the second; respiration was occasionally sighing; his chest was full and resonant; râles were present throughout, and coughing was accompanied by expectoration of clear, frothy mucus; his tongue was coated with a thick, yellowish, pasty fur; gums spongy, and encroached upon by tartar, in spots;

abdomen large, having, numerous dilated vernicles upon the surface; skin soft and moist; eye natural; top of head bald.

He was a little excited during the examination, and said that it affected him, but at the close he appeared cheerful, and proposed exercise — said he had walked four miles the day before, and felt the better for it. He asked what I thought of the probability of apoplexy in his case, dwelling upon instances of death from that disease, which he had known. His mother died of it, with general paralysis, at seventy; his youngest brother had something like it at forty. I endeavored to turn his thoughts upon pleasanter themes. The day was hot and sultry. We took our course along a new portion of the city, and having gone, perhaps, three miles, with occasional intervals of rest, were returning home. I thought he seemed in a hurry, disposed to silence, less observant. After a time he asked if we were almost there. In answer to the inquiry if he felt tired, he said his *left* leg was numb. I suggested that he sit down. He said no, and continued his step. His breathing was excited, and his face pale. A little further on he paused and held up his right foot, flexing and extending it, and then stepping, as if to be assured of its integrity; he said it was a strange sensation which he felt; he had never experienced any thing like that before. I urged him to stop. He resumed his walk, making little exclamations of surprise. I supported his left arm. He seemed determined on walking faster, but soon began stubbing his right foot at every step, inclined to fall forward. His right knee presently bent beneath the weight of his body, and gradually refused to bear him. Still he hobbled, dragging the leg. I could no longer prevent his falling; he reeled toward the right, and sank down upon the plank sidewalk. I placed him sitting while he endeavored to remove his right boot, using his left foot and hand — his right arm hung loosely by his side. I suggested rubbing his leg, telling him not to be frightened. He said nothing, but looked vacantly along the street. I asked him why he complained of his left leg's being numb, when it was his right. He did not know that he said

left His pulse was regular, full, soft, not so rapid as when observed before. Perspiration fell from his face. When asked if he felt better, he said he guessed so.

A gentleman passing kindly assisted to get him into his carriage, and in a few minutes we lifted him to the residence whence he had walked so confidently a couple of hours before. His face was sunken and haggard, but in no way distorted; his right side was powerless, and deprived of sensation. His mind did not appear bright, though he articulated correctly. When laid upon a lounge he yawned repeatedly, and asked with non-concern if it was a good time for him to sleep, saying that he felt sleepy. The pupils were unaffected. He uttered one other articulate expression and immediately went to sleep. His pulse was regular, full, soft, 100 per minute; respiration irregular; extremities cool. He was easily roused, answering to the point, but sank into more and more profound slumber. He evacuated urine incontinently, while asking for assistance. He was put to bed in a cool room, his head slightly raised and ice applied. He had eaten less than usual that morning, and tasted no food since. A saline laxative was given, and hot bottles applied to his feet.

Dr. Bevan came to my assistance five hours after the attack. Coma was then complete. His pulse had fallen to 90, regular, soft, full. Respiration irregular, through the open month, stertorous; pupil contracted. It was ordered that a grain of *Calomel* be given every four hours till his bowels should move freely, and sinapisms applied to his feet and legs. Not much change appeared through the night; the pulse remained at about 92, soft and full; respiration irregular, 11 to 16 per minute. After a full breath there followed respirations slower and less complete successively, till they ceased altogether for an interval of fifteen seconds, to be renewed by a full long drawn breath, accompanied by stertor.

Second day. Face flushed, surface of body hot; pulse 109, rather harder; respiration as before, pupil contracted; breath fœtid. P. M. Increasing consciousness. Night pulse 116, steady, improved consciousness; whenever roused he contin-

ued to yawn, remained awake a few minutes, then fell again into deep sleep; took three cups of oatmeal gruel through the day, swallowing without difficulty; no paralysis of any part of face visible; a spasmodic movement of the right knee observed while he was asleep; urine voided involuntarily; tested, it gave strong acid reaction and considerable quantity of albumen.

Third day. Pulse 96; respiration regular; continued through open mouth; consciousness further improved; when awake answered questions correctly, with some obstruction; left angle of mouth slightly elevated; tongue protruded straight; pupils nearly normal; right eye watery, the lid not closing perfectly; inclined to lie upon his back or right side. A half ounce of *Sulphate of Magnesia* induced a copious evacuation of the bowels. The *Bromide of Potassium* was commenced in 20 grain doses, to be given every four hours, and beef tea through the day. Noon: Pulse 118. He grew more and more feverish and restless till night; occasionally muttering delirium. The *Tincture of Digitalis* was given in fifteen drop doses. 9 P.M.: The skin was hot and dry. A Dover's powder of ten grains was succeeded by quietude during the night.

Fourth day. Pulse 90; respiration regular; face pale; he tried to get up, evincing no surprise that he could not; asked where we were; when moved in bed complained; right thumb and fingers slightly drawn into the palm. P.M.: Pulse 124, harder; increased heat, perspiration and lividity; respiration accompanied by tracheal râles which did not excite coughing. *Digitalis* and *ice* continued without diminution of excitement. Night passed restlessly; bathed in perspiration.

Fifth day. Pulse 108, weak; respiration 24; expectoration streaked with blood, thick, fœtid. He appears quite animated, asked for friends and tried to leave his bed; right cheek flaccid and opposite angle of mouth more drawn up; had an incontinent movement of the bowels; there appeared a bright red spot, two or three lines in diameter, within the right conjunctiva; tongue dry and dark. P.M.: Pulse 144; restlessness and

perspiration not less than day before. Wine was given every four hours. Night: Pulse intermittent, losing one or two beats a minute. A sixth of a grain of *Sulphate of morphia* was given at bed time; sound sleep followed.

Sixth day. Weaker than ever; rational; pulse 104, regular; perspiring freely. Noon: Pulse 118; 1 P.M., pulse 126; 2.30 P.M., pulse 132; 6 P.M., pulse 140; 7 P.M., pulse 144; deglutition difficult through the day. Little food or medicine administered.

Seventh day. Pulse 122; very drowsy; prostration marked; perspiration continuing. P.M.: Breathing labored; face constantly livid. Night: Pulse 152; respiration 50; comatose; pupil again contracted to size of a pin's head; tongue dry and brown; slight tympanitis; skin bathed in perspiration, relaxed, pale.

Eighth day. 3 A.M.: Profound coma; pulse 153; respiration 54; laryngeal râles. At 9 A.M. he died.

It is to be observed that there were no premonitory symptoms. The onset was sudden, the progress gradual. There was at first numbness, weakness, and slight confusion of ideas; then paralysis, anæsthesia and stupor; lastly insensibility. The first interval was perhaps five minutes, during which he continued on his feet; twenty minutes later he began to sleep; in five hours he was deeply comatose.

Amelioration of symptoms was present every morning, and, after the second day, increased excitement every evening — frequent pulse, passive congestion of head and face, heat of skin, perspiration, restlessness and muttering. Next morning ensued tranquility and improved consciousness, but with them came extended paralysis. These exacerbations were more marked each day, the reactions being less and less satisfactory; on the seventh day there was a return of the worst apoplectic symptoms, ending in exhaustion and death.

Hæmorrhage to considerable extent within the left hemisphere was no doubt the exciting cause. Mental agitation, heat and exercise, may have determined it; but back of all existed

disease. An autopsy was impracticable. We must rely upon the antecedent history to reveal the primary affection.

There had been marked debility for two years at least, induced amid external conditions the most favorable to healthy nutrition. Materials were prepared in abundance. There must have been, therefore, a defect presiding over the formative cell changes; and, necessarily then, degeneration. The tissues became relaxed, softened, fatty; hence the muscular debility, disease of the kidneys, enlargement of the heart, and fragility of the capillaries; hence the apoplexy.

This defect of nerve force arose from a central lesion perpetuating itself. He had always allowed himself to be neglectful of important matters of business, and careless of every thing around him, a trait dependent on inability to keep his mind on one subject very long at a time. Respected by all for his good deeds and sound judgment, he was disposed to melancholy and difficult to entertain. After a life of extreme moderation in the employment of the generative function, its power wholly ceased four years ago. From that time all his mental peculiarities grew more striking. These facts, gathered after the death, confirm us in the belief that organic disease of the brain had existed long.

Finally, this local manifestion of some morbid condition may have been congenital. One cousin by the mother's side died insane; another is an imbecile. Considering also the circum stances of the mother's death, we are urged to believe that the original departure affected the constitution from birth, was indeed impressed upon the germ at conception.

Thus we have endeavored to sketch the natural history and progress of one form of apoplexy. Of course no treatment which does not look to the support of the patient, either before or after the accident of the hæmorrhage, can be of any avail.

234 THIRTY-FIRST STREET, *September 10th*, 1868.

FLUID EXTRACTS.

MR. EDITOR: A short time since there appeared in your columns, an article on the subject of "Fluid Extracts," signed H. D. Garrison. As reference was made several times to my process, and more particularly as said process was not in one instance correctly stated, allow me to disabuse the minds of your readers of the false impressions his article may have conveyed.

Mr. Garrison says: "The extracts to which you refer ('Duffields') are patented, which, as before remarked, effectually patents the entire list." This view of the case, though worthy of serious consideration, is not the chief point to which I wish to direct special attention. Dr. Duffield's process *I believe consists essentially in producing a vacuum in his percolation and in his receiving vessel*, and then allowing the menstruum to flow in upon the drug, where he gets a pressure upon *his percolating menstruum* of nearly fifteen pounds to the square inch. *This rapidly filtering a liquid* through a drug, if not new, as some broadly intimate, is certainly expeditious, which I believe is its chief merit. That it avoids heat (whether judiciously or not) is *the best offered the profession.*"

The *italicizing* is mine, Mr. Editor.

Without entering into particulars, however much excused I might be, in the face of Mr. G.'s false assertions, allow me to take up the subject and prove two points:

1st. Mr. G. has not comprehended the process which he so virulently attacks, attributing, as he does, to its author "profound ignorance" or "unworthy motives," and,

2nd. I have not violated the principles of the United States Pharmacopœia.

Before "percolation" was adopted into the processes of the U. S. P., the plan of *maceration* was solely used, and in the edition prior to the one of 1866, (1858) while suggesting a *trial*

of percolation and giving both methods, it advised beginners and not thoroughly educated pharmaceutists, to hold preferably to maceration. I agree with Mr. Garrison that percolation when *rightly conducted*, will produce fluid extracts which contain the active principles perfectly preserved. The Pharmacopœia is the "hand-book" of the practical pharmaceutist, but can not be followed *verbatim* by the large manufacturer.

Mr. Garrison contends that "Dr. Duffield says his process removes the air and allows the alcohol to permeate the drug more perfectly." He attacks the process as *one of percolation*, because I made use of the word "permeate." Any one of your readers will understand the differences.

Mr. G. also contends that a vacuum *produces decomposition* of volatile bodies, *i. e.*, "alkaloids, ethers, oils, etc." Should these conclusions be proven correct, (which I claim can not be, unless chemical principles and affinities are upset completely), he will be individualized as the foremost in the rank of original investigators in this realm of organic chemistry. I admit an ether can be volatilized in vacuo, but I deny it is *decomposed* by simple heat in vacuo. Mr. Garrison has confounded *evaporation* and *distillation* with *decomposition*. Mr. Star, the famous toxicologist, recommends the use of a vacuum, in evaporating ether from solutions of the alkaloids separated in analyzing the viscera, etc. Mr. Boudault prepares his famous "pepsin" in vacuo *to avoid decomposition*. *Sugar* must be made in vacuo to obtain it pure and nice. Mr. Garrison's idea is at direct variance with the views of our most accomplished zoöchemists, such as Liebig, Mulden, Star, Loing, Pasteur, and others. In order to promote decomposition we must have oxygen present, which is impossible in vacuo.

Pasteur's researches have demonstrated that oxygen is the *pabulum* of the vibriones and zoö-germs which promote decompositions. How, then, can decomposition set in in a vacuum which, being empty, can not contain the elements which support the existence of the organic spores which produce decomposition. Take the familiar act of canning fruit, and try and

reconcile Mr. G.'s argument with the practical fact that *you do keep fruit better in a vacuum.*

Mr. Garrison has, in his attempt to prove that a vacuum is a promoter of decomposition, shown himself sadly deficient of the very first principles of organic chemistry, and made himself the laughing stock of every educated chemist. When writing a scientific article, it would be well to use the right terms, and not confound "evaporation" with "decomposition," nor "permeate" with "percolate."

I have studiously avoided attacking the Pharmacopœia processes, knowing that those processes were based upon years of experience. The principles I follow are the same as laid down in that much abused book. It has laid out formulæ based upon one pound of drug, on a scale commensurate with the wants of the dispensing chemist, should he see fit to become his own factor. It tells you to manufacture ether and spirits of nitre in glass retorts; but if I should use a large still made of lead, and operate a little differently to distill 100 pounds per day, I do not consider I have violated the Pharmacopœia, provided I produce the *same article* it requires. The hypercritical eye of Mr. Garrison views it differently. I claim the committee who compiled the U. S. P. had no such idea. They wished simply to have a standard that the pharmacist who makes his own preparations, could follow. It lays down *principles — Principia non formulæ* — and any one violating those principles should be arraigned. I use the same menstruum *macerating in vacuo* as long as I want to, from six to twelve days, as the case may require. It is one thing to percolate two pounds of drug, and another to percolate four hundred pounds. In one case there is hardly any chance of failure, in the other every chance of one.

PROLONGED RETENTION OF LIFE BY INFANTS WHO HAVE NOT BREATHED.

BY JAMES T. NEWMAN, M.D.

AUGUST the 14th, 1868, was called to see a young woman who had recently given birth to a child, the attendants becoming alarmed at the amount of blood the girl was losing. Had not this been the case, in all human probability, the subject of which I am about to relate would never have been presented to your consideration. At half-past twelve on the evening above mentioned, I visited the patient and found her suffering from hæmorrhage. I immediately took a couple of napkins, folded them, making a compress, placing them at the lower part of the abdomen, so as to prevent the womb from filling with blood. The woman recovered; but the interest of this paper does not rest upon some particular method of treatment, but in a very singular phenomenon, and one wholly new to me, but in searching some of the French and German authors, I find that Solomon was right when he said there was nothing new under the sun.

The friends of the girl were doing all in their power to conceal her shame, and had they not despaired of her life, none but the family would ever have known what the matter was. In making this known I feel confident that I am committing no breach of honor. The child under consideration was born at eight in the morning, and was quietly wrapped up in an old blanket and put out of sight. I was told that it was still-born. I do not know why that I requested to see it, but suffice it to say that the child was shown me, and there was something in its face told me that it was not dead; but I said nothing. The next morning I had an occasion to use the stethoscope on an old lady living in the same locality. I called in to see my patient. After finding her doing well, I asked to see the child

and was told that it was in the coffin. I still looked as if I would like to see it, and the mother noticing my countenance, raised the lid. I took the stethoscope and placed it over the region of the heart, and to my great astonishment I could distinctly hear the sound of the heart. I took the child out of the coffin, used Marshal Hall method. In the course of thirty minutes the child commenced breathing; the pulse was natural; it cried, and took the breast eagerly. It is a fine looking boy to-day, and for aught I know, bids fair to live three score and ten years. Since seeing this very remarkable case, there is no doubt in my mind that many children are consigned to the grave without an effort to induce respiration.

ADDITIONAL REMARKS ON AN OBSTETRICAL CASE.

BY W. ANDERSON, M.D., LEROY, ILL.

EDITORS JOURNAL: I do not purpose to go into a review of the lengthy article by Dr. Miller and other subsequent contributors, in regard to my report of "instrumental case of delivery," but as my report was very brief, I wish to simply add a few more statements in order to render the case more comprehensible to the dull understandings of the "sage practitioners" who have condescended to throw so much light on this department of midwifery.

I may now add (which for the sake of brevity I neglected to do at first) that there were three physicians present, all of whom had had extensive experience in obstetrics, and two of whom were graduates, the third being Dr. Leal, of Mt. Pleasant, a young man of a very fine practice and repute. We did not differ as to method of procedure. *Chloroform* was talked of, but there was none present, and it was five miles to town, and a very cold night. I stated that we would not have used *Chloroform* had it been at hand — the child dead or alive. That

remark was inadvertent. We might have tried it had the child been alive, though I think even then it would have been unavailable. But the child was dead, and its use under the circumstances was not necessary, and we all thought unadvisable, as a recent death from anæsthesia in Bloomington had created a great antipathy against its use. The arm had protruded as far as the elbow, was black and pulseless, and all the signs plainly indicated the death of the fœtus. The family physician had been present twelve hours. Why he waited so long is not for me to say. He was not called till quite late in labor, and the hand had been down for two or three days. I believe the child might have been saved at the right time, and it had been dead but a short time when I arrived. I was called in on account of my instruments. The attending physician had been waiting simply for "something to turn up." He is an "irregular," in the highest sense of that term, but the consulting physicians are still willing to bear all the responsibility for all the proceedings after they arrived. I think the above statements are as satisfactory as a long discussion, and require less space. I would not have alluded to the family physician were it likely to hurt his feelings by his ever reading it, and the statements render it unnecessary to reply to the numerous communications on the subject in detail, even if the slang in some of them *did* not place them beneath my notice.

PHILADELPHIA CORRESPONDENCE.

UTERINE DISEASES.

PHILADELPHIA, *September 24th*, 1868.

"THE diseases in question, (uterine,) are those to which females are *most commonly exposed.* * * Inflammation of the neck of the uterus is an *exceedingly common disease.* * * In reality, inflammation is compara-

tively quite as frequent in the uterine system as in other similarly organized organs." Thus writes Bennet; and his assertions are amply vindicated by statistics of the present day. Notice the clinics at our various colleges, and we shall find, if we examine with impartiality, that a very large proportion of females applying for treatment are affected with uterine disease of some character and degree. The prevailing affections — at least so far as our observations, clinical and otherwise, goes — are inflammation and ulcerations. With these, there is, as a necessary accompaniment, more or less hypertrophy. The prevalence of uterine affections in our cities is unprecedented. Indeed some have gone so far as to assert that "three-fifths of our females" are so diseased. If we make an examination, we shall perhaps find slight inflammation — but a faint blush tinging the uterus — or it may be congestion deep and full has set in, or still further ulceration may be decided. With whatever of these degrees or characters of disease the uterus may be attacked, the general train of symptoms is identical. No local symptom will indicate the disease, but that dull and dragging pain in the back and loins, that pain between the shoulders, the indigestion and constipation of the bowels, and the peculiar cephalic symptoms, themselves so diagnostic of uterine affection, all lead us to a positive conclusion that there is disease of the uterus or its appendages. Why *is* this disease so markedly prevalent? What are the causes of uterine disease? The anatomical predisposing cause of all uterine inflammatory diseases, is especially the great vitality and vascularity of the neck, as well as the highly developed mucous membrane lining that cervix. This fact remembered, the *incidental* causes are to a degree manifest. First, should be ranked parturition. Marriage in the United States takes place early in life. The wife is a mother ere she has fairly reached womanhood. The uterus is lashed into excitement early, and metritis results. Again, "*fashionable woman*," ("*stylish*") during her menstrual period, adorns herself for the ball-room, where she revels in dance, heated and fatigued, to gain for herself

dysmenorrhœa, consequent probably upon inflammation of the cervix. Further, this same *personification of the elite* must lace her waist to a span, that *her* form (?) may be remarked upon. From this anteversion or retroversion is the result. Still *another* phase in this *fashionable woman's* life. In order that she may be present at *all* the parties, balls and operas, she mustn't have a *baby* to tie her to her home. "Oh, my, it's not fashionable to have a child!" she says, and if perchance, pregnancy occurs, off she hastes to some murderess or beast, and from her she *buys* an abortion. Inflammation, ulceration, and perhaps even death ends her *fashionable career!* This is no overdrawn picture. It is the *real truth*, but God forbid that *such* style, *such* fashion should prevail among the intelligent women of this country! And what is the natural result of this condition? What evil comes out of it? In my last letter I stated that it "prevented, to an alarming extent, the furtherance of the race." It is true that abortions are a frequent *cause* of uterine affections, but it is as true that they are the *results* of this class of diseases. Sterility is by no means an uncommon complaint among women. It is an abnormal condition of nature. Why is it so common? It is simply because uterine diseases are so prevalent, and no cure is instituted for it. Country practitioners, as a class, give medicines for the symptoms indicative of uterine affections. In additions to the various diseases of the uterus *preventing* pregnancy, they are the constant cause of miscarriage and abortions, thus by two ways fulfilling the same end, namely: arresting the promotion of the race. A case occurred in our clinic a short time ago, which illustrates this point. A woman, thirty-two years old, had had five miscarriages. Rest and inclined posture had no effect in thwarting the abortion. A vaginal examination revealed an ulcer about the os uteri. A few applications of *Argent. nit.* cured the disease, and the woman is now a mother. Another case under my own observation, in which the patient, aged thirty-seven, had had *thirteen* miscarriages. Four applications of *Argent. nit.* healed an abraded surface of cervix, and the

woman is now a mother of two living children, and is five months *enciente*. If such and kindred treatment can cure these cases, is it not well to devote *special* care and time to it? I shall illustrate the subject more fully in my next letter, by giving some interesting cases. Yours, E. R. H.

BOOKS RECEIVED.

DISEASES OF CHILDREN: A Clinical Treatise Based on Lectures delivered at the Hospital for Sick Children, London. By Thomas Hillier, M.D., London, etc., etc. Philadelphia: Lindsay & Blakiston, 1868. Pp. 402. Chicago: W. B. Keen & Co. $3.00.

This book consists essentially in a series of short monographs on the diseases of children between two and twelve years of age. Surgical diseases are omitted. It is a very useful contribution to the literature of the subject. The American edition is afforded us in the usual elegant style of the Philadelphia house whose imprint it bears.

THE PHYSICIAN'S VISITING LIST FOR 1869: Eighteenth Year of its publication. Philadelphia: Lindsay & Blackiston. Sold by booksellers and druggists.

THE PHYSICIAN'S HAND-BOOK FOR 1869. By William Elmer, M.D. and Albert D. Elmer, M.D. New York: W. A. Townshend & Adams, Publishers, No. 434 Broome Street. 1869.

NEW MEDICAL JOURNAL. THE CALIFORNIA MEDICAL GAZETTE: A Monthly Journal of Medical and Surgical Science. Published at San Francisco, by A. Roman & Co.

A double column quarto comes to us in good typographical style, and with good paper. We regret that no editorial name appears, although its contents show it to have received good editorial supervision. $5.00 a year (gold) in advance. Single copies 50 cents. Roman friends, your type is too uniformly small. You will spoil your readers' eyes.

AITKIN'S SCIENCE AND PRACTICE OF MEDICINE. Second American from the Fifth London Edition. Now ready. In

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Fifteen months have been spent by Dr. Aitken in thoroughly revising this *Great Work*, and adding to it many valuable additions and improvements, amounting to about 100 pages of new matter, included in which will be found the adoption and incorporation in the text of the "*new nomenclature of the Royal College of Physicians of London;*" to which are added the *Definitions* and the foreign equivalents for their English names.

The subjects of *Malignant Cholera*, of *Paralysis*, of *Epidemic Cerebro-Spinal Meningitis*, and of *Intestinal Obstruction* have been entirely re-written; and several other subjects in connection with the treatment of disease, of the greatest importance, are considered for the first time in this edition.

The first American edition of this work was out of print in little more than twelve months after publication. So rapid a sale may be accepted as an evidence of its appreciation by the profession of this country, and as a recognition of its claim to being a fair exposition of the Medical Science and Art of the day.

In the present edition the editor has carefully revised his contributions, and added much new material. His additions are equal to about three hundred pages of the London edition. They will be chiefly found under the heads of: *Lardaceous Degeneration*, *Vaccination*, *Measles*, *Erysipelas*, *Typhoid*, *Relapsing*, *Yellow and Malarial Fevers*, *Dysentery*, *Malignant Cholera*, *Malignant Pustule*, *Syphilis*, *Pathology of the Dietic Diseases*, *Scurvy*, *Parasitic Diseases*, *Rheumatism*, *Gout*, *Chronic Bright's Disease*, *Cancer*, *Tuberculosis*, *Diseases of the Nervous System*, *Diseases of the Heart and Lungs*, *the Sphygmograph Pyæmia*, *Diseases of the Digestive Organs*, *Diseases of the Kidneys*, and *Diseases of the Cutaneous System*.

They also including *twenty-two new articles* upon subjects not treated of, or only incidentally mentioned, by the Author, namely:

Camp Measles.
Spinal Symptoms in Typhoid Fever.
Typho-Malarial Fever.
Chronic Malarial Toxæmia.
Chronic Camp Dysentery.
Cholera Morbus.
Cholera Infantum.
Hereditary Syphilis.
Gonorrhœal Rheumatism.
Corpulence.
Physical Diagnosis of the Diseases of the Brain and Spinal Chord.
Delirium of Inanition.
Chronic Alcoholism.
Epileptiform Neuralgia.
Auscultation in Health and Disease.
Capillary Bronchitis.
Plastic Bronchitis.
Dilatation of the Bronchia.
Fibroid Degeneration of the Lung.
The Inoculation of Tubercle.
Chronic Pyæmia.
Syphilitic Disease of the Liver.

The subjects of Locomotor Ataxy, Glosso-Pharyngeal Paralysis, Aphasia, Dilatation of the Bronchia, the Sphygmograph and its tracings in disease, were introduced into this text-book by the Editor in the first American Edition (1866). They were first treated of by the Author in the Fifth English Edition (1868), and his articles on these disorders are chiefly condensed from those of the Editor, with the exception of the one on Dilatation of the Bronchia, which Dr. Aitkin has abridged from Dr. T. G. Stewart's excellent article in the Edinburgh Medical and Surgical Journal, December, 1867.

The issue of the first edition of this magnificent work was duly credited in the JOURNAL. At present we have only space to reiterate our warm commendation of the work as the leading one of its department. No physician who has the slightest claim to keeping pace with Medical Science, as it is understood in the present age, can afford to forego the possession of this (we were about to write *encyclopædia*) complete, reliable, common sense and practical treatise on the Practice of Medicine. Hereafter, when the pressure on our pages will permit, we shall take occasion to call attention to many particulars wherein Aitken's Practice excels all previously published books of reference on the subject.

EDITORIAL.

Medical College Fees—Free Medical Education.

A cheap advertising medium of a cheap school in Cincinnati, perpetrates the following, which we place in parallel columns for the edification of our readers. We shall not give the name of the medium, as it is sufficiently indicated in a recent number of the *Leavenworth Herald.* We did not before understand the concentrated scorn involved in the allusion by our Leavenworth *confrere*, to the "*Cincinnati College of Medicine and Surgery:*

THE MEDIUM, AUGUST, 1868.

We maintain, and we believe we will be sustained in our views by a right-thinking community, that the true method to elevate the profession is to do away as far as possible with pecuniary obstacles in entering the profession, and to place at a high standard the attainments necessary for graduation. Want of wealth, then, would not prevent the poor man, eminently qualified, for competing for the honors of the profession, while the high qualifications required for graduation would deter both rich and poor alike, unqualified, from seeking after them.

THE MEDIUM, OCTOBER, 1868.

FREE MEDICAL EDUCATION.—The editor of the *Chicago Medical Journal*, in its column of editorials, which are served up in such a novel and interesting manner, says that the *Medical Repertory* is in favor of free medical education—the instructors receiving no compensation. When we recollect that he belongs to Chicago, we are not surprised at the statement. People up there have a loose way of stating and doing things, and the editor undoubtedly believes in free lying if he doesn't in free medical education.

When in connection with this it is known that the "college" this medium represents, puts its professors' tickets at *twenty dollars* "for the lot," we do not wonder at our belief in the "free lying" of the editor of the *Medium*, who, we believe, is a "Professor" in that delectable concern. "High qualifications" (at least of a moral sort) will certainly prove no hindrance to graduation at the "Cincinnati College of Medicine and Surgery." We turn this creature over to Brothers Logan and Sinks.

Responsibility.

It would seem unnecessary to state that the editor of this, or any other periodical, does not, from his position, hold himself responsible for the views or statements of correspondents. The editor's business is to make his paper a medium of communication between the different members of the profession, and thus stimulate healthful investigation and disseminate the most advanced ideas. *Good faith* is what is demanded of all parties. The present editor proposes always to permit large latitude of opinion and expression to correspondents, only claiming that the usual courtesies of gentlemanly intercourse be preserved. Thus, if any one of our readers disagrees with either correspondents or editors, all he has to do is to put down his reasons therefor in respectable English, transmit it to the JOURNAL, and if it is not too long, and is to the point, we will immortalize the opinion in our pages.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—OCTOBER 15, 1868.—*No.* 20.

PHYSIOLOGY.

Passage of Sanguineous Corpuscles through the walls of the vessels; mechanism of this phenomenon and consequences which result therefrom in relation to the formation of pus, and to absorption in general.

TRANSLATED EXPRESSLY FOR THIS JOURNAL, BY WALTER HAY, M.D., ASSOCIATE EDITOR.

THE point of departure of this problem is found in the researches of M. Cohnheim into the subject of the passage of sanguineous corpuscles through the vascular parietes without apparent lesion of these parietes. The white corpuscles would constitute pus, and the red would form under the given conditions sanguineous extravasations.

Let us first consider the facts; we will next examine the mechanism by means of which they are produced, and the consequences which may be deduced therefrom.

Mr. Cohnheim exposes to the air the mesentery of a frog paralyzed with woorara. Inflammation is developed, and at the period of oscillation the white corpuscles, which seem glued to the internal face of the wall of the vessel, depress this wall, lodge in sorts of pockets which are dependent from these, and continuing their migration, spread themselves into

the surrounding tissues, where they are found in a free state, similar in all respects to what they were in the interior of the vessels.

The passage of the red globules through the vascular parietes has been observed and described by M. Strickler, (of Vienna,) and his pupil, M. Bussak. When they poison frogs they inject under their skins a solution of a tenth part of chloride of sodium, and produce thereby in these animals a scorbutic condition, which is manifested by hæmorrhages into the lungs, the liver, the kidneys, the intermuscular tissue, etc. The two preceding observers have determined that i these conditions the red globules which form the hæmorrhagic foci have traversed the walls of the capillary vessels. They have seen, in fact some of these globules which had remained imprisoned in the wall, half projecting, and as if entangled in the intra-parietal opening through which they had found an issue.

M. Bastian has repeated the experiments of the German physicians, and has made them the subject of a communication to the pathological society of London. After having paralyzed a frog by means of a subcutaneous injection of woorara, he tied the femoral vein, and soon the blood is massed in the capillaries and the veins. The following are the consecutive phenomena which he was enabled to observe:

Whilst examining the interdigital membrane the serum is seen to transude and induce a certain amount of œdema. The blood soon begins to oscillate in the vessels, and after fifteen or twenty minutes it is completely arrested in some of the capillaries. The red corpuscles are ranged one against the other, and appear to form a homogeneous cylindrical mass. The stasis extends next to other capillaries, and terminates by involving the veins. At the expiration of forty minutes projections form in the walls of the capillaries, which increase in number and in volume so as to give these walls a tuberculated appearance. Then these projections separate gradually from the capillaries, and are found in the neighboring tissues masses of red corpuscles.

If the ligature of the femoral vein is removed, the circulation is re-established in the capillaries, and it is then possible to see besides the red globules which constituted the aforesaid masses, other globules pursuing the same transit as those, and more or less entangled in the capillary parietes. It is possible thus to follow the globules in all the phases or degrees of their migration. The experiments of M. Bastian are thus confirmatory of those of MM. Cohnheim, Strickler, and Bussak.

Such are the phenomena observed. By what mechanism are they produced, or in other words, how can the white or red sanguineous corpuscles in conditions of inflammation, the scorbutic state, or under compression, traverse the capillary parietes? Three orders of explanation, three hypotheses, are proposed:

The most simple, that which suggests itself to the mind very naturally, is that the vascular walls are perforated with pores in which the corpuscles may engage themselves. Such likewise is the theory adopted by MM. Cohnheim, Recklinghausen, Letzerich, F. Keber, etc. The microscope also seems to justify this manner of viewing the subject. M. F. Keber, indeed, since 1854, and in a very recent treatise designed to recall his first investigations, has described and figured the pores or stomata of the capillary vessels, and the vacuities in the intestinal epithelium. M. Cohnheim, on his side, agreeing with MM. Asby, Eberth, Auerbach and others, admits that the capillaries are formed by the juxtaposition of flattened epithelial cells. Now at the points of reunion of the angles of the cells there would remain orifices, pores, through which the corpuscles placed transversely might become engaged, in consequence of the pressure which they undergo in the vessels.

The second hypothesis has for its advocates MM. Strickler and Bussak. These authors consider the parietes of the capillary vessels as composed of a protoplasma, soft, homogeneous and contractile. This protoplasma possesses the property of giving origin to appendices, filiform prolonga-

tions which increase, are hollowed out and form new capillaries in communication with the parent wall. The transit of sanguineous globules does not, therefore, necessitate the pre-existence of pores in the capillary wall; it occurs in consequence of an active function in this very wall. MM. Strickler and Bussak admit that the protoplasma in question comports itself like the cells of connective tissue, and that it can, after the manner of these latter, undergo pathological transformation.

Finally, according to a third hypothesis, sustained by M. Bastian, it is not the capillary walls which are active, but, in fact, the red corpuscles of the blood. These last, indeed, can traverse vascular membranes, in consequence of certain active amæbord movements which may manifest themselves subsequent to alterations in the blood plasma. The phenomena, therefore, may be produced in the same manner as the passage of leucocytes through the venous parietes, as M. Cohnheim has established, or through permeable membranes, as M. Lorbet has demonstrated.

We shall not dwell further upon these different hypotheses; they demonstrate the necessity of new investigations. However it may be, the facts which they attempt to explain, exist none the less, and the consequences which are deduced from them recall into discussion theories by which other orders of phenomena have been explained.

We have seen already that M. Cohnheim, after having determined the passage of white globules through the vascular walls, was disposed to consider them as constituting, after their escape, pus globules. M. Lorbet shares in the same opinion. M. Lionel Beale, on the contrary, opposes it. According to the English author, the white corpuscle of the blood and the pus corpuscle are by no means one and the same thing. They can not ever be transformed, the one into the other. He adds, that suppuration does not pursue the same process in warm blooded animals as in frogs. His understanding of the genesis of pus is as follows:

The pus corpuscle originates from the normal blastema

(germinal matter) of any tissue or element whatsoever. If this blastema receives an excess of nourishment, it increases, is divided, sub-divided, and gives origin to products which differ by their properties from the primitive elements. Pus may, therefore, originate from the proliferation of all sorts of blastema, of that which is peculiar to nerves, to muscles, to vascular walls, etc., as if that which pertains to epithelial cells or to connective tissue. But according to M. Beale, although he admits the passage of the white globules through the vascular parietes, these globules do not become pus corpuscles; it does not appear to him rational to give a new appellation to an element which has only changed its position.

We are here presented with three or four theories, at least, to explain the formation of pus. According to M. Virchow, and his school, the pus globule originates only from cellular proliferation of connective tissue.

Mr. Beale asserts, as we have seen, that every tissue may participate in this process of proliferation.

According to M. Robin and the French school, pus globules may be developed by genesis in the midst of an exudation or of a blastema.

Finally, is presented a new theory, or rather an old theory rejuvenated, according to which these same globules are only white blood corpuscles, which may have traversed the vascular parietes.

In the face of all these hypotheses, these doubts, it must be understood, that the most elementary facts in pathology are discussed, and that openly in the Academy, the long mooted question is ever agitated, if pus may or may not be re-absorbed in all its elements. It is permitted to hope, however, that the recent researches into the parietes of vessels and of mucous membranes, and a greater number of experiments upon the passage of the blood globules through these walls and membranes, will throw some light upon the manner in which the mechanism of phenomena, so numerous and so varied, which are associated with absorption, is to be comprehended.

It is evident, for example, that if the porosity of the vascular walls, or of the epithelial investment of membranes should receive a definite demonstration, the general opinion upon the absorption of organic elements, and of mineral substances reduced to powder, would be entirely modified.

DYSENTERY.

BY A. A. DUNN, M.D., CHICAGO.

Having, in my practice, so frequently seen inflammation of various tissues of the body subside and disappear under the sole, or very nearly the sole, administration of anodynes, my mind tends very strongly to the opinion that we may, in a vast number of cases, bedevil our patients with drugs better dispensed with than dispensed. Assuming, as we are warranted in doing, that in most forms of disease the tendency of the organism is to recovery, to health, through the eliminative and recuperative processes of the vital forces, it may be safe also to assume that recoveries under the simple use of anodynes would have ensued, in the majority of cases at least, had nothing been given. Argument, perhaps, independent of experience or observation, can hardly demonstrate that proposition; but, based upon what we daily observe, we are confirmed in its probable truth. This admission, however, does not relieve us of the impression that, in the very cases which would most probably recover if uninterfered with, judicious medication might secure a more speedy recovery, as well as promote the comfort of the patient during the recuperative process. Hence, in those cases where anodynes appear to secure a rapid and complete recovery, we can not logically assume they would have done as well without the drug. Every medical man knows the value of *Opium* in the treatment of peritonitis, and few, I imagine, rely upon any other article, or combination of articles in which *Opium* is not

included, administered internally, in the treatment of that disease in its early or active stage. Let me here throw in a disclaimer to the belief that peritonitis is a peculiar disease. It is a simple inflammation of the outer lining membrane of the bowels, differing in no respect whatever in its nature from simple inflammation of the pleura and other serous membranes. The phenomena of the ailment in the different localities, vary, because of the locality, or, rather, because of the difference of function in the structures in the different localities, and not because of difference in the functions of the membranes themselves, because they are one and the same wherever found, and the same treatment is applicable to all, except where other structures may contraindicate it. Now, if *Opium* is apparently of potential benefit in the treatment of one structure of the human system, why may it not be equally so of another? On the surface, there is nothing to exclude the presumption. Experience, practical observation, however, establishes the fact that *Opium* is not admissible in the treatment of certain organs, the brain, for instance, and the glandular system may put in a qualified claim to the same consideration; but experience raises no sufficient objection to its use in inflammation of the mucous membrane of the bowels.

Perhaps, inflammation of no structure or organ has had so much to do toward inducing my present train of thought, as that of the rectum; inflammation at that point being recognized by the erudite as colitis, colonitis, colo-rectitis, to say nothing of numerous other learned synonyms, and by the unlearned in medical lore, usually styled "the vulgar," as dysentery and bloody flux. Dysentery is characterized by mucous discharges mixed with blood, attended with burning pain at the anus, with severe, grinding, colicky pain higher up, and in many cases, with an almost constant and an urgent desire to evacuate the bowels; indeed, so urgent is the demand to go to stool as to be very nearly, if not quite, resistless. Now, when pain is encountered, so constant and distressing, the most obvious indication is to relieve it, and

the profession, in this disease, are united upon that necessity. Various, perhaps, is the resort, but the majority exhibit *Opium*, or its preparations. This, in my opinion, is wise. But a too common impression prevails that other internal measures are necessary to remove the *cause* of the inflammation going on at the lower end of the gut, and a supposed sluggish liver is generally made the scape-goat to bear the sins originating elsewhere, and that much calumniated organ is persistently bedeviled to induce it to undo that which it had "neither art nor part" in doing. My experience has long since led me to the conclusion that dysentery, as a rule, is amenable to much simpler treatment than is involved in the idea that the liver is the faulty member and the portal circulation needing to be unloaded. Opiates in my hands have yielded the best results. In my young patients I promise myself less from this line of treatment; but even in them there is much to hope from it. Various circumstances, in adults as well as in infants, at times require a deviation from the rule, but, after satisfying myself that the upper bowels are not loaded, my practice is to obtund sensibility as rapidly as is safe, and hold the patient under the influence of the narcotic long enough to allow the inflamed membrane time to heal. 'Tis very true that the patient or his friends may become, and often do become, restive under the prolonged locking up of the bowels; but I ask them if they had an inflamed elbow, would they persist in bending it in order to heal it? This may be considered a palpable sort of argument to most minds, and usually I find no great difficulty in having my own way. A laxative may be resorted to finally, and yet, such is my confidence in the natural powers, that I not unfrequently omit it.

More than six years since, my wife was attacked with the most violent dysentery ever occurring in my family, and the only medicine I gave her was *Morph. Sulph.*, in half grain doses, every two hours, till a fair degree of comfort was obtained, when the dose was repeated at longer intervals, yet so as to keep up the impression for a week, the quantity

being then decreased and the intervals lengthened; but, soon finding no increase of the disease, the medicine was suspended entirely. Within a fortnight from the commencement of the attack, the natural action of the bowels was resumed and the general health returned. I am safe in saying that was the most violently painful case of the disease I ever encountered. Comparative comfort was not secured till the second day, though some sleep was obtained, out of which she was not awakened to take medicine. Now, whether opiates, or the anodynes have a specific curative effect upon inflammation, wherever established, or not, I am convinced that in dysentery the judicious obtunding of sensibility in all cases where pain is a prominent feature, contributes to the recuperative efforts of nature. Except in very mild cases, fomentation over the abdomen of simple warm water, or of hops, or other bitter herbs, I rarely omit; though I confess to the belief that the addition of herbs other than hops to the water, is nearly "all in your eye." As they do no harm, however, whims of patients or their friends in this direction, may be safely gratified.

Injections I have resorted to infrequently, not hoping much from them: but, having learned of late the wonderfully curative effect of *Carbolic acid* in fresh wounds, whether incised or contused, I have thought it possible that article might be equally applicable in dysentery, sporadic, epidemic, or chronic, and am determined to try it topically in the first favorable case that comes under my care. The analogy between inflamed mucous membrane and fresh wounds is so remote as perhaps to cause the proposed treatment to appear ridiculous, but, nevertheless, I shall try it. The putrefactive tendency of epidemic dysentery is so conspicuous, that the antiseptic properties of *Carbolic acid* may here, when topically applied, find an appropriate field for usefulness.

CORRESPONDENCE.

Editor CHICAGO MEDICAL JOURNAL:

SIR: I read a communication in the September number of your JOURNAL, from B. F. Lightfoot, M.D., of Murraysville, Ill., which gave an account of a case of so-called colic, and, as the doctor "regrets the views of some of the numerous readers of the JOURNAL," I respectfully ask leave to make a few comments on this *remarkable* case. As nothing is said of the previous history of the case, (except that a Dr. G. had given the patient some *Podophyllin*, which operated drastically), nothing of the diathesis, temperament, habits, whether strumous or otherwise, we can not so *positively* infer that the extraordinary treatment was the direct cause of the fatal result, as we obviously might, if we knew that this boy was not one of the strongest and most robust subjects. I wonder it never entered the head of Dr. Lightfoot that the immense quantities of powerful drugs that this boy took, had any thing to do with the grave symptoms which his patient exhibited after he fell into his hands. I should certainly expect that if I treated a patient in that terribly heroic way, whatever the disease might be, (or even if he had *no* disease) that he would speedily become worse, and, unless he had the constitution of a mule, he would inevitably succumb.

I think it would puzzle Dr. Lightfoot himself to show what were the indications, for almost any of the powerful drugs which he exhibited to this boy, to say nothing about the extraordinary doses — and I wish to say here *en passant*, that when a country doctor deals out his own medicine at the bedside, *he is very likely to give twice as much as he professes*, (or thinks he is giving) *to give*. This is my opinion, judging from what I saw in my younger days. Only think of it — a boy of sixteen years, takes, for several days, ten grain doses

of *Calomel*, and three and one-half grains Dover powders every four hours, then *Iodide of potassium*, (in doses we are not informed,) *Syrup of iodide iron*, opiates, astringents, tonics, etc., etc., and all for what? Why, for what he called a tumor! It would seem that the boy had tympanitis, for the doctor says it (the swelling) commenced near the "center of the abdomen" and extended into the right iliac region. Not satisfied with the great irritation which the *Podophyllin* had induced, "with the copious watery discharges," he goes on to give him more irritants, such as *Calomel*, *Iodide potassium*, *Iodide iron*, etc., etc. If this boy did not have peritonitis (perhaps subacute) when he commenced his treatment, I don't see how it could be otherwise than developed soon after by the monstrous quantities of drugs exhibited, and it is no wonder to me that the patient "was a mere skeleton at his death." As no *post-mortem* examination was made, we shall never know what ravages these drugs made.

I *had* supposed, before I read this paper of Dr. Lightfoot's, that this *excessive* over-dosing system was about obsolete, even in the most benighted rural districts of this country, but it seems I was mistaken.

We ought, however, to thank Dr. Lightfoot for his account of this case, and it ought to be held up as a warning against a system which, to say the least, is a mere routine of guess-work, random course. This case shows, also, how long a patient may withstand a course of drugs, which, to use as mild a term as deserved, is damnable. *I* consider it barbarous. It would do no discredit to the doctors who treated Charles the II., *vide* Macauley. It is just this sort of therapeutics that has made believers in that miserable delusion, homœopathy, and if we ever expect to make any headway against this, as well as divers other impositions upon the public credulity, we must have a more rational system, *more generally* practiced by us so-called regulars.

I would advise our brother to read Flint, Aitken, Bennett, or Reynold's System of Medicine, (to say nothing about

"Forbes Nature and Art," Bigelow *et al.*) and no longer trust to such obsolete books as Eberle's Practice, and he will never be guilty of treating a patient in that way again.

B. S. WOODWORTH, M.D.

LOOT.

Abortion as a Cause of Insanity.

The Superintendent of the Michigan Insane Asylum, in his report just published, says: "Mental derangement has generally occurred as a result of local injury, and the serious impairment of general health, directly traceable to the criminal act. In a few cases it has operated as a moral cause; as, for instance, when the unfortunate sufferer has borne a child which has been permitted to remain with her only long enough to show the unhappy mother the priceless value of the gift she had previously refused to accept. In these cases the immediate cause of the insanity is remorse. Unless this most disastrous practice be speedily arrested by the efforts now being used to suppress it, and by more stringent laws, severely punishing all parties implicated, it will materially increase the number of female patients annually presented for treatment."— *N. Y. Medical Journal.*

Antiseptic Properties of the Sulphites.

Recent experiments have shown that the sulphites of lime, hyposulphite of magnesia, and the sulphites of magnesia and soda, possess all the antiseptic properties of sulphurous acid, with the advantage that their action is more uniform and certain. In experimenting on animals and on himself, Dr. Polli (*Med. Times and Gazette*) found that large doses could be taken without risk. On killing animals treated with sulphites, and others not so treated, he found that the former were more slow to decompose, and, indeed, remained quite fresh when the others had become putrescent and offensive. Another series of experiments showed that the administration of the sulphites was sufficient to effect a more or less rapid cure where blood-poisoning was present, as in fevers.— *Humboldt Medical Archives.*

Prolapsus Ani.

Dr. Schartz, in *Hufeland's Journal*, recommends for this affliction a solution of the *ext.* of *Nux vomica*, of the strength of one or two grains to the ounce of distilled water. Of this solution he gives six to ten drops every four hours. This is the dose for very small children; to larger children fifteen drops at the same intervals. Children at the breast, two or three drops.— *Nashville Journal of Medicine and Surgery.*

Styptic Paper.

The universally used perchloride of iron is too well known to need notice, but we see that it has been assuming a new and perhaps more convenient form. A French inventor has prepared styptic paper so that one can carry it in his pocket. He takes a carefully tinned vessel, and dissolves one pound gum benzoin and one pound of rock alum in four gallons of water. The paper is dipped into this, and when dry a solution of the perchloride of iron is applied with a roller or brush, and the paper is then kept in a dry place. It must certainly be valuable for small wounds. Is it of use in dentistry? We think so. When we hear more of it, we will report upon its value. We are ambitious to make this a dental newspaper.— *Dental Office and Laboratory.*

Carbolic Acid and Creasote.

As we receive many letters asking questions in reference to these substances, we have thought that a few words in reference to these hydro-carbons, which are so much used in dentistry, might not be inappropriate to the occasion. It is a common error to suppose that creasote and carbolic acid mean the same thing. They have many properties in common, and their chemical influence upon other bodies is often analogous, yet, as they are derived from different sources, and the quantative dissimilarity of their elements, it is evident that they are not the same. They are of comparatively recent discovery, and are already recognized as of high value in medicine and in the arts.

Creasote was discovered in 1830 by Richenback, and is prepared from wood tar, which is distilled till it has the thickness of pitch, and then suffered to stand till two layers are formed, the lower one only of which contains the creasote, and after it goes through a series of changes by the introduction of modifying chemical agents, the pure creasote of commerce is produced. Pure creasote is nearly colorless, is of

an oily nature, and at a temperature of 380° can be entirely volatilized without leaving any residuum. It has a burning, caustic taste, and a smoky, penetrating odor, and is inflammable. When applied to the skin, it is highly caustic. Its use is evidently that it coagulates the albumen when used for dental purposes. It is irritant, escharotic, and styptic, when locally used, and is regarded as a general antiseptic and narcotic. In certain diseases of the throat it makes a valuable gargle.

When it is designed to detect the difference between carbolic acid and creasote, it may be done by noting the boiling point, creasote boiling at 307°, and carbolic acid at 368°. The sesqui-chloride of iron will also make a blue color when added to the carbolic acid, but does not affect the creasote.

CARBOLIC ACID is called *phenyl*, *phenic acid*, etc. As its name indicates, it is an acid derived from carbon oil. It is usually prepared from coal oil, and is produced in the form of colorless, deliquescent crystals, which fuse at 95°, and have the odor of smoke, and an acrid taste. It is a powerful antidote to the formation of putrefaction in animal tissues, and has been used for preserving dead bodies, etc. In the dissecting room it is much used of late to preserve bodies while under the surgeon's knife. A French author says that eight grains in solution is enough for this purpose. It is taken inwardly, in doses of one or two drops, to prevent vomiting, and for other complaints. It is a powerful styptic, and when applied to a bleeding surface it checks the hæmorrhage at once. When applied to purulent or other offensive discharges, it is of great value. When applied to an exposed pulp, it obtunds the sensibility. A pledget of cotton dipped in a drop of the acid, and allowed to remain a few minutes, relieves the pain much better than creasote. The mouth-wash used by dentists is made by putting five drops of carbolic acid in a tumbler of water.

Carbolic acid and glycerine is much used for sloughing ulcers, and for various ulcerations. In time, we believe that dentists will find it invaluable. No office will be without it pure, or in some of its combinations.—*Ibid.*

Minute Investigation of the Kidney.

M. Rendonsky (*Virchow's Archiv.*, bd. 41, 1867) gives the following results of his investigations of the minute structure of the kidney: 1st. The uriniferous tubules are continued into the capsules of the malpighian bodies, or terminate in

blind extremities. 2nd. The malpighian capsules are placed on convoluted tubules, lined by nucleated epithelium; other and smaller canals, supplied with transparent ephithelium, communicate finally with these tubuli. 3rd. Straight tubuli are connected with some capsules, which, at a short distance from these capsules, show the characters of the convoluted tubuli. 4th. The convoluted and the straight tubes are connected by tubuli, which are lined by transparent (non-nucleated) epithelium; the convoluted tubes are in communication with the capsules, and the straight tubes open into the pelvis of the kidney. 5th. Henle has described canals with transparent epithelium, as continuations of the tubuli uriniferi, which are really blood-vessels.

Local Treatment of Soft Chancre.

The application of carbolic acid causes the rapid destruction of the ulcerating surface, with decomposition of the poison, and without any considerable degree of pain. The surface of the sore is turned white by the acid; this becomes a thin, dry, yellow scab, which separates in about two or three days. The application should be repeated to the third or fourth time, when it may be found that the sore has healed under the scab. The healing of the sore is generally completed in an average of ten to fourteen days.—*British Med. Journal.*

An Aged Primipara.

In response to the inquiry made through the London *Lancet*, with respect to child-bearing in advanced life, Dr. Cachot, of St. Mary's Hospital, informs us that he delivered in that institution a female of her first child, at the age of 53 years, and again in sixteen months. The labor in both confinements was tedious, from inertia of the uterus, and required the forceps. The mammary glands enlarged, but produced no milk. The children lived in both cases.—*Pacific Medical and Surgical Journal.*

Veratrum Viride in Constipation.

In an obstinate case of habitual constipation, Dr. T. C. Miller (*Journal of Materia Medica*) gave three drops, five times a day, of the *tr.* of *Veratrum viride*, and in the course of two weeks effected an entire recovery.—*Record.*

The Siamese Twins.

Prof. Paul F. Eve, in the *Richmond and Louisville Journal*, re-asserts the opinion of many physicians and surgeons

who examined the case a score or more years since, that the connection between the Siamese Twins is mainly a cartilaginous one, (probably a prolongation of the ensiform cartilages), and that their rumored intention to soon visit Europe for disunion purposes, is a needless expense, as any surgical tyro, even, could as well separate them by the knife or *ecraseur*.

Carbolate of Quinia.

Prof. Wenzel remarks (*Jahrbucher der Gesammten Med.*, Aug. 28, 1868), that carbolic acid, which in solution acts as a poison upon the lower animal organisms, is borne in proportionate, though large doses, by the higher animals and man, when introduced into the body in a diluted state. It was administered to some animals with advantage in their food in England at the time of the rinderpest. With bases, even weak ones, such as quinia, carbolic acid loses in a great degree its irritating properties at the point where it is applied; when combined in the proportion of two equivalents of the acid to one of quinia, the compound is characterized by a slight sharpness, and a decidedly bitter taste. Prof Bernatzik proposes a preparation composed in this manner, and he hopes that it will prove an energetic disinfectant for internal use. G. Braun has given it with benefit in puerperal diseases, and Duchek in several typhous cases, and in one of pyæmia. Pills containing 1 grain of quinia with 6-10ths of a grain of carbolic acid were given repeatedly without causing the slightest inconvenience, and according to these statements 3 to 6 grains of carbolic acid were given daily without injury. The compound was prepared by dissolving 60 parts of carbolic acid with 100 of quinia, in 300 of highly rectified spirit, filtering the solution, distilling, and evaporating to the consistency of turpentine, and then mixing some extract of acorus and powdered cassia.—*Amer. Jour. Med. Sci.*

Aphonia of Nearly Two Years' Duration Cured by Electrical Stimulation of the Inferior Laryngeal Nerve. By Dr. Philippeaux.

Various methods of treatment had been unsuccessfully tried in a case of aphonia which had originated two years previously, and which was supposed to be due to paralysis of the nerves of the vocal cord. The patient was a healthy female, twenty years of age, It was ultimately decided by Dr. Philippeaux to try the effect of electrical stimulation, applied in such a way as to directly influence the inferior laryngeal nerves. For this purpose, one metallic pole was

inserted into the lower and posterior portion of the pharynx, and the second was placed on the skin over the crico-thyroid muscles. A current of considerable strength was passed between these two points: almost immediately after the closure of this current the patient started, uttered a loud cry, and began to speak with a facility equal to that which she had possessed before the commencement of the aphonia. Dr. Philippeaux remarks that he has frequently met with success in treating aphonia by electricity, but never before had he the good fortune to obtain so instantaneous and perfect a cure.— *Edinburgh Medical Journal.*

Vesicular Bronchitis of Both Lungs in an Infant —Recovery. By David Wooster, M.D.

S. S——, a female child aged eighteen months, had measles of a very severe type. The throat was sore and the tonsils had ash-colored spots. On the subsidence of the eruption an oppressive, dry cough supervened, and the tongue became dry and brown. The pulse rose to 160 during the accession of fever, and fell to 80 when the fever remitted; it seldom remained above 100 long at a time. The child had the usual remedies prescribed in similar cases; had Trousseau's mixture, gum syrup and ipecac (the antimony omitted in consequence of vital depression); the diachylon jacket was also applied next the skin.

I was unable to visit my little patient at night, in consequence of my own poor health at the time. An excellent physician who was called in the night for three nights, intelligently supplemented my treatment by giving syrup of senega, nitre for scanty urinary secretion, and small doses of calomel for inactive bowels. Several other things were done, besides the infinite items of domestic treatment for infants, such as onion syrup, flaxseed poultices, mustard cataplasms, etc.

On the fifth morning after the bronchitis became marked, I called at 10 A.M., and found the child in clonic spasms, with pulse exceedingly weak and filamentary, double strabismus and dilated pupils. Soap and-water enemas relieved the spasm, but the pulse remained small, feeble and intermittent, and less than 100. I now asked the parents if they would trust me implicitly and solely with the child, living or dying. They consented to obey my directions implicitly and in silence, until the child should convalesce or expire.

I ordered the tables to be cleared, all damp clothing and

poultices and cloths to be removed from the child, the room to be cleared of guests and friends, placed a thermometer in a convenient place and directed the temperature of the room to be maintained at 70° night and day, while air should be admitted from an open window; made a toddy of one part whisky and six of sugar and water, of which a teaspoonful should be given every hour while the pulse should remain below 110. Directed beef juice to be given in such proportion as to amount to six ounces in twenty-four hours, milk as much as the child should wish. No other medication or treatment was permitted.

The child began to mend directly, and although exceedingly feeble for some days, at the expiration of less than two weeks it was entirely well.

This was a typical case of vesicular bronchitis supervening when the system was already in a deteriorated condition in consequence of a severe exanthema; and a case which would have doubtless terminated fatally had we persisted in the ordinary medical treatment.—*Pacific Journal.*

Vaginismus.

Scanzoni objects (*Monatschrift fur Gabertskunde, Detroit Review*) to the severe operative measures adopted and recommended by Dr. Marion Sims for this troublesome difficulty. He says: "Of more than a hundred cases that have fallen under his observation, in times past, he has been completely successful in the treatment of all to which he was able to give his personal attention, without in a single case having recourse to the knife. The first condition of success is complete sexual abstinence; for the first three or four days a tepid sitz bath should be used night and morning; warm local bathing with aq. Goulardi, or the same applied with lint, several times a day. Defecation must be regulated, and friction from motion carefully avoided. After a few days the sensibility of the parts will be so much allayed that a solution of *Arg. nitrat.* x.–xx. grs. to ℥i. may be applied with a brush. After about eight days continuance of this treatment, vaginal suppositories of *Ext. belladonna* and Cacao butter may be placed behind the hymen and in contact with it, daily. These remedies, either alternately or simultaneously, must be continued until every trace of inflammation has disappeared, and the normal sensibility is restored. Generally two or three weeks will be required to attain these objects. Then dilatation must be commenced, but for this purpose sponge tents are useless. A

graduated series of milk-glass conical specula are best adapted to this object. After the first slightly painful attempt, the patient generally will be able to introduce it with facility, and it may be allowed to remain from one-half to one hour. Even when the hymen remains, it will not be necessary to incise it, as dilatation can be effected without recourse to that measure. At first the dilator may be used every two or three days, then every day or twice a day for two or three hours, gradually increasing the size of the dilator until the object shall have been attained, which in some instances may require an instrument admitting dilatation, as that of Segalas. Sitz-baths, *Belladonna*, and pencilling with *Nitrate of silver* may be required from time to time, and the cure will usually be completed in from six to eight weeks. It will be seen that, although the treatment of Sims is attended with an equally satisfactory result, it is of a much more serious character (a fatal result from hæmorrhage is reported to have occurred) than the treatment adopted by Scanzoni; and after the operation the success of the treatment depends generally upon the subsequent dilatation. The time required, moreover, is nearly the same by either process. Hence the procedure of Sims is in no respect to be regarded as an advance in gynecology, as little so, even, as is his operation of splitting the cervix uteri, which, with such glowing eloquence, he lauds for the cure of dysmenorrhœa and sterility. Scanzoni is thoroughly convinced that these are but surgical splurges, that impose on the inexperienced only, while the professional expert justly ignores them. He predicts their fate. For a time they will be the theme of much remark; soon after they will pass into merited oblivion."

Cataract.

We have long believed that more thorough efforts should be made by physicians to remove, or rather prevent, the full formation of cataract. Twenty years ago, some cases were reported by Dr. James Bryan, of Philadelphia, then President of the College of Physicians and Surgeons, of that city, in which cataract was stopped in its progress by medical treatment. We have had two such cases lately, and they have disappeared under the treatment very similar to that then used, and we believe many cases of incipient cataract may be thus removed. The effort is surely worth the trial. — *Guardian of Health.*

Caustic Ligature.

M. Vallette, of Lyons, recommends strongly that in treatment of erectile tumors by the multiple ligature, a seton, impregnated with *Chloride of zinc*, be passed through the strangulated mass. Fifteen or twenty hours afterward, he cuts down on the subcutaneous caustic seton, and removes it, introducing a further quantity of caustic, if necessary. He says that this method is much less painful than the simple ligature, and more efficacious than it, or than the treatment by caustics only.—*Reporter.*

Sterility.

W. C. Amussat, Jr., reports a case of sterility in a male cured by an operation for phimosis. One year afterwards, his wife gave birth to a son.

Epilepsy.

W. M. Cornell, M.D., LL.D., in the *Guardian of Health*, gives the following "handful of recipes" brought to him by an epileptic patient. They had been given him by a medical gentleman of eminence, who was for many years at the head of one of the hospitals in Massachusetts:

℞ 1. Nitrate of silver half a drachm, extract of stramonium one scruple, nux vomica half a drachm; made into fifty pills with crumbs of bread.

℞ 2. Strychnia twelve grains, vinegar two ounces. Mix, and take ten drops three times a day in sugar and water.

℞ 3. Wild cherry and prickly-ash bark, equal parts, eight ounces; put it in a gallon of soft water; boil till two-thirds are evaporated; add two pounds of brown sugar. Dose, a wine-glassful before each meal.

℞ 4. Chloric ether, two ounces, spirits of camphor two drachms; sweet spirits of nitre two ounces; mix. Dose, a teaspoonful three times a day, in water.

℞ 5. Oxide of silver one drachm, extract of conium two drachms, colocynth one drachm; mix, make into sixty pills. Dose, two three times a day.

℞ 6. Tincture of nux vomica four ounces, tincture of stramonium one and a half ounces, chloric ether two and a half ounces; mix. Dose, a teaspoonful three times a day,

℞ 7. Fowler's solution half an ounce, chloric ether two ounces; mix. Dose, fifty drops at bed time, in water.

℞ 8. Extract nux vomica two scruples, extract stramonium half a scruple, oxide of silver one drachm; crumbs of bread sufficient to make sixty pills. One three times a day.

℞ 9. Tincture of nux vomica three ounces, compound spirits of lavender two drachms; mix. Dose, twenty-five drops three times a day, in sugar and water.

It seems scarcely necessary to add that the treatment was totally unavailing. It is probable that in most cases of

epilepsy the difficulty is mainly one of habit. Any strong mental influence may at times control its manifestation. Hence the long list of so-called remedies, which have really no influence save from the patient's faith. Physiological and and pathological *habits* need more attention than they have yet received. This not in epilepsy only.

Foreign Intelligence.

Action of Mercury.— At the recent meeting of the British Medical Association, in Oxford, Professor Hughes Bennett read an abstract of the results which had been arrived at by the Edinburgh Committee. The Committee, after a laborious investigation on the action of mercurials on dogs, arrived at the conclusion, that, whether administered in large or small doses, the preparations of mercury exert no cholagogue action upon that animal — in fact, that they always diminish the flow of bile. How far this report can serve to throw light upon the action of mercurials on man, is, however, a matter upon which more than one opinion can be held. In the course of their investigations, the Committee have found that mercurials, when administered in large doses to dogs, purge them; and, when in smaller and frequently repeated doses, induce the same group of phenomena, which are observed in men under the same circumstances, viz., fetor of the breath, salivation, and ulcerations of the gums. Having accurately ascertained these facts, the Committee appear to consider that the fact that mercurials fail to increase the flow of bile in the dog, affords an almost positive proof that these drugs do not exert a cholagogue action in the case of man. The experiments supported also the modern view that the diversion of the bile through a fistulous opening out of the body does not materially interfere with the intestinal functions, but leads to exhaustion of the body altogether. Dr. B. W. Richardson accepted the report as a model of scientific work, but urged still that mercury did exert a beneficial effect, and that experience confirmed its value. Was it possible, he asked, that mercury acted on the pancreatic gland as it did on the salivary glands, and that it caused an increase of pancreatic secretion? Dr. Bennett, in reply, said it was quite possible the pancreatic function was modified under the action of mercury, for, as one of the tables indicated, the pancreas in five cases was reported as very vascular.—*Medical News.*

Ovariotomy.

Dr. Dunlap, of Springfield, Ohio, has performed ovariotomy on 38 patients, since 1843. Of these, 13 were unmarried.

The operations were all by the long incision, and only two were without anæsthetics. Nine died after operation; one from peritonitis, two from hæmorrhage, one from chloroform, one from accidental overdose of morphine, one complicated with cancer, one from exhaustion, one from congestion of the brain, and the ninth from excessive vomiting. Three of the successful cases have died since their recovery from the operation, of other diseases; the remainder are all now living, and in good health.—*Boston Medical Journal.*

Remittent Fever in Rome.

M. Pantaleoni, of Rome, says that the remittent fever which prevails in that city, is found in two distinct forms. 1st, the gastric, which is mild and easily managed; 2nd, the nervous form, which is ataxic, but different from typhoid in many of its characteristics, as the absence of abdominal symptoms, pain, diarrhœa, etc., and of the rose spots, as well as the anatomical lesions discoverable in typhoid after death. The French soldiers, during their stay in Rome, had typhoid fever the first six months, and after that would contract nervous fever.— *Medical Record.*

Thymic Acid.

This acid, obtained from the essential oil of thyme, has been proposed as a succedaneum of carbolic acid or creasote. It emits no disagreeable smell, and is powerfully antiseptic. Its composition is C_{20} H_{14} O_2. In a concentrated form it may take the place of nitrate of silver; and, as an antiseptic, it should be disolved in 1,000 parts of water, with the addition of a little alcohol.—*Ibid.*

EDITORIAL.

What's in a Name?

"*Tell me, now, that name of thine;* for a name often pleases," said old Theocritus, agreeing excellently well with Shakspeare and the majority of mankind. Some men will sacrifice the best energies of a long and laborious life to secure a name. A recent novelist deplores, through a thick octavo, the miseries of a poor wretch who had *No Name.* Shakspeare, who, of course, recognizes the importance or

unimportance of every and any thing, makes one of his characters use these words (which we think we have seen quoted before):

> "Good name in man and woman, dear, my lord,
> Is the immediate jewel of their souls:
> Who steals my purse steals trash; 'tis something, nothing,
> 'Twas mine, 'tis his, and has been slave to thousands;
> But he that filches from me my good name,
> Robs me of that which not enriches him,
> And makes me poor indeed."

This highly virtuous sentiment, it is true, was uttered by *Iago*, the man of somewhat dilapidated moral qualities, which detracts some little from its force; nevertheless, even the Devil can quote good Scripture, and in *apropos* style. At the present time it appears that the Devil and Iago are both wrong. In these days stealing a good name is one of the readiest means whereby little and unknown men (not to speak of some *scamps*) are foisted into notice:

> "So feeble souls are gulled,
> And they get money."

The wrongs that Sir James Clark, Sir Astley Cooper, Velpeau, Physick, Chapman, Mott, and others revered by the profession, have suffered, in this way, and the fortunes that have been built up at their expense — are they not written in the Æsculapian chronicles?

But we forbear recording them again, although no recording angel will drop a tear to blot out the record against our name of the warm expletives that rise (unspoken) to our lips. Just now we notice the organization of an "Eclectic" Medical College, which begins its career by stealing the name of the distinguished Edinburgh Professor, BENNETT, as its own patronymic. Bennett, who scorns such quackery with a depth and strength which knows no limit. Every one knows that the word *eclectic* is well enough in itself, and is the practice of every instructed physician in Christendom, but when the word itself is stolen from its legitimate signification, and then

the name of John Henry Bennett is appropriated *vi et armis* — positively kidnapped, as sponsor — we — well, we begin to think the larceny passes from *petite* to *grand.* We mildly protest that the thing verges upon rascality.

Space forbids further comment just now, but we wish our readers to understand that when they ask for Prof. Gunn, of Rush Medical College, formerly of the University of Michigan, they may stumble on a person *probably* of the same name from the "*Bennett Eclectic Medical College.*"

So far as the Editor of this JOURNAL is concerned, he wishes it to be distinctly understood that he does *not* peddle electro-magnetic machines, or deal in Homœopathic pellets, Spiritualism or Uroscopy.

When physicians or patients come to this city to see any medical man of their choice, let them *beware of names*, or lending either money, time or health to strangers.

Rush Medical College.

Opening of the Twenty-sixth Annual Session. The introductory exercises of the college took place on Wednesday evening, the 30th of September. Beside an unusually large number of students, the spacious lower lecture-room was crowded with visitors. We were especially gratified at the presence of very many well-known and distinguished practitioners, both from the city and country.

After prayer by the Rev. Dr. Patterson, the Chaplain, President Blaney welcomed the class in appropriate terms, and, having given a brief sketch of the history and present position of the institution, introduced Prof. EDWIN POWELL, who pronounced the introductory lecture. It is unnecessary for those who know Dr. P., to say that it was a high-toned and scholarly production, replete with sound sense and elevated views — rising at times to an elegance of diction and eloquence of expression, which elicited rounds of enthusiastic applause from the audience. We had hoped to give it to the readers of the JOURNAL in its entirety, but regret that as yet

we have failed to prevail upon its author to furnish us with the manuscript.

The progress of Rush Medical College has been, since its re organization in 1859, so steadily onward —its advantages and numbers so constantly improving and increasing, that we are fain to fall back on the almost stereotyped, but strictly true, formula — its prospects were never before so brilliant as they are now. Harmony prevails in its counsels, professional zeal inspires its teachers — its spacious and commodious building is well filled with students, whom even a brief observation will convince, are above the average grade of intelligence and culture in medical schools. These things, taken in connection with the enlarged means of illustration now at its command, and the great clinical advantages it affords, will work out in the best *practical* manner the great problem of "the elevation of the profession."

We write these lines somewhat in the exultant spirit of one who has had a small part in bringing them to pass, but more as a journalist who is proud to chronicle the triumphs which painstaking effort and zealous industry will ever, in the end, attain over noisy declamation, witless diatribes, and unscientific, loose and impractical experiments in "Medical Reform."

Medical Imbroglio.

It is to be regretted that two of the faculty in one of the leading medical colleges of the West, have so far forgotten themselves as to have engaged in a pamphlet quarrel, in which pretty severe things have been said upon both sides. Having ourselves a profound and hearty distaste for professional polemics, we have carefully abstained from even the attempt to compass the merits of this particular case, for fear of becoming prejudiced in our opinions thereof and about. Individually, the contestants have earned the high respect and confidence of the profession throughout the country, and the JOURNAL congratulates the faculty of the college with which they are connected, for their wise and prudent resolutions commanding the peace.

Bad Taste.

We hear that the *Apostle*, probably smarting a little under the probable failure of the pet system of "Reform" which he has so long advocated, and *claims* to have inaugurated, had the questionable taste to allude to certain gentlemen, with whom he slightly disagrees, *by name*, in a recent discourse which he recently delivered to a small and select, yet nominally public, audience in a southern locality in this city. Aware, as we are, of the *Apostle's* somewhat inflammable temperament, and the attenuated nature of his cutaneous envelope — with the tenderest regard for his mental, moral and physical well-being, the JOURNAL begs of him, in his evangelico-medical *role*, not to attempt the Boanerges character, as it is not his best style — still worse to attempt the *Peter* line — swords are dangerous playthings. On the whole, would it not be better for our venerable friend to drop the apostle altogether, and try the older part — *Jeremiah?*

Note to the Editor.

(*Extract from Editorial of Journal of August 15th.*)

"A correspondent wishes to know what kind of a pessary we prefer in our practice. We decline to answer — let each be persuaded in his own mind. In a tolerable experience of over twenty years, we have never recommended any kind, but what we have regretted it." The impression one would receive from this is, that all pessaries are useless.

Case 1st. Retroversion. The fundus lies low in the hollow of the sacrum and the os looks toward the symphysis pubis; after it is carefully replaced, it immediately falls back to its old position. Query—How would *you* manage the case?

Case 2nd. Fundus lying low in the hollow of sacrum, and the os looking nearly toward the coccyx. Retroversion with flexion. Restore it to its natural position, and the os looks towards the hollow of sacrum, but left to itself falls back immediately to its old position. Query—How will *you* treat it? If there is a better way than replacing the organ and keeping it in position by mechanical means, I desire to find it out, as I have a half dozen of just such cases on hand.

The Editor does *not* take the ground that in all cases "pessaries are useless." He does not take this ground, because he does not wish to be drawn into any controversy upon the subject.

He believes that pessaries sometimes relieve *effects*, never remove *causes*.

He believes they often do an immensity of mischief.

He believes that the weight of the wholly or partially enlarged uterus, upon which the displacement, etc., depends, may, in general, be relieved by medical and hygienic measures.

In his reply to the previous correpsondent, he merely gave his own experience.

He would treat the cases suggested by this correspondent according to what he found to be the matter.

News and Items.

Obituary. — Dr. Joseph N. McDowell, one of the most distinguished surgeons in the West, and a resident of St. Louis for twenty-eight years, died September 25th, of congestive chills, in the sixty-third year of his age. Professor McDowell will long be remembered for great professional sagacity and tact, and especially for eccentricities of genius which have made his name famous.

Christian Friedrich Shoenbein, the eminent chemist, died at Baden Baden about the 1st of September. He will be especially recollected as the discoverer of ozone; also of antozone, and the inventor of gun cotton.

President Haven strongly advises the admission, as students, into the Michigan University, of women, on the same condition as men. He likewise contends that, in the Medical Department, the Professors should be chosen for their scientific acquirements, irrespective of whether they are allopathic or homœopathic.—*Chicago Tribune Telegram.*

Whether this involves admission of females to the Medical Department, we are not informed.

Dr. J. Marion Sims has been elected a corresponding member of the Obstetrical Society of Berlin. He is well worthy of such honor.

Prof. L. C. Lane, of San Francisco, was recently made the victim of an annoying suit for malpractice. The prosecutor took more than a year of time to get up his case, and yet, when the evidence was concluded in court, the case was so clearly a bare-faced attempt to extort money, that the judge refused to permit it to go to the jury.

The mortality for July last, in San Francisco, was 346. This is said to be unprecedented in the history of the city. For the three summer months, the thermometer did not rise above 75 ° at noon-day, and was not as high as 70 ° for more than ten days. During the same period there were not more than twenty days of clear sky, from sunrise to sunset. Yet one-third of the cases of death were from disorders of the bowels, a class of diseases usually ascribed to the heat of summer.

A child died recently in Jackson, Ohio, from the effects of the oil from a tobacco pipe, applied to a burn on the lip. The little one was soon after seized with convulsions, and died within twenty-four hours.

Dr. M. H. Houston records, in the Richmond and Louisville *Medical Journal*, a case of abnormal gestation, where, four years after conception, the fœtal bones were discharged through the rectum. The patient, at last accounts, was in fair prospect of recovery. Quite a number of queer cases of monstrosities are chronicled by the medical press as of recent occurrence. Philosophical considerations of identity are puzzling observers. Individuals and sexes are mixed in most glorious confusion.

Captain John Travis, of pistol fame, is now in this city. It is difficult to conceive of an instance showing more remarkable cultivation of steadiness of muscle. Many will recollect the great feat he performed in Louisiana in 1853,

shooting, at the first shot, on a wager of one thousand dollars, an orange off the head of John P. Osgood, at the distance of twenty paces. Another great feat of his, at Niagara Falls, in 1857, was much talked of at the time. Monsieur Blondin, the renowned rope walker, was crossing the Niagara river from the American to the Canada side; when half way across, Blondin held out his hat, and the Captain, from the deck of the steamer "Maid of the Mist," at a distance of three hundred and sixty feet, shot a ball through the hat. Recently he shot seven birds out of ten, with his pistol, "ten yards rise and ten yards boundary." Shot No. 35 to the pound. The day, unfortunately, was windy, or he would undoubtedly have killed all the ten birds. The feat may well be said to be a remarkable one, and "deserves to be classed among the most marvelous trials of skill." Physiologically, there seems no limit to the degree of development of either human mind or muscle.

Francis H. Ramsbotham, the eminent physician, and author of a well known work on Obstetric Medicine and Surgery, died on the 6th of July last, in his sixty-eighth year.

A Paris correspondent of the *Medical Record* gives the details of a case where an insane woman, sixty-four years old, swallowed a silver fork for the purpose of committing suicide. After ten months sojourn and peregrinations in the stomach and intestines, it was ultimately discharged through a fistulous opening to the left of the umbilicus. The patient recovered. [This case was first reported in the *N. Y. Med. Journal*, as we learn since the above was in type, some eighteen months since.]

Removing Tan.—Tan may be removed from the face by mixing magnesia in soft water to the consistency of paste, which should then be spread on the face and allowed to remain a minute or two. Then wash off with Castile soapsuds, and rinse with soft water.—*Chemical News.*

Oil Stains in Marble.—These can be removed by applying common clay, saturated with benzole. If the grease has

remained long enough, it will have become acidulated, and may injure the polish, but the stains will be removed.—*Chem. and Drug.*

Chlorodyne. — Ed. McIngall, Jr. (St. Louis *Medical Reporter*), gives the following formula as the best method of preparing the compound:

Take of sulphate of morphia,	gr. lxiv.
Alcohol, 95 per cent.,	f ℥ ij.
Chloroform, purif.,	f ℥ vj.
Sulphuric acid,	q. s.
Ext. cannabis ind. (Allen's)	℥ ss.
Oleoresin of capsicum,	gtt. xij.
Hydrocyanic acid (Scheele's)	gtt. xcvj.

Shake together the sulphate of morphia, alcohol and chloroform, then add the sulphuric acid, shake well until it becomes clear, then add the oleoresin of capsicum, ext. cannabis and hydrocyanic acid.

Dr. Leland A. Babcock's Silver Uterine Supporter.

BALTIMORE, August 14, 1

L. A. BABCOCK, M.D., *Freeport, Ill.*

MY DEAR SIR: — I find your Uterine Supporter the desideratum in displacements of that organ. All former appliances for this purpose must ere long be classed with the things of the past.

Its advantages are so apparent that no intelligent physician will use any other supporter, after observing its action in a single case of prolapsus uteri.

I shall take pleasure in recommending it to my patients, and presenting it to my classes in Washington University.

I am dear sir, very respectfully, your obedient servant,

HARVEY L. BYRD, M.D.,

Professor of Obstetrics in the Medical Department of Washington University, of Baltimore, Maryland.

FOREIGN NOTES AND EXCERPTA.

Influence of Diet upon the Mother's Milk. Translated by D. F. Condie. M.D.

The contradictory opinions that are entertained in respect to the influence of diet upon the quantity and quality of the milk, induced Dr. Subotin, of Petersburg (*Virchow's Arch.*, vol. xxxvi. p. 561), to institute a series of experiments to settle, as far as possible, the question. His investigations led him to the following conclusions:

1. That animal food increases the daily yield of milk, while a diet of

vegetables diminishes it. Food of a fatty nature caused a marked diminution of the milk, and even, when persisted in, its entire suppression.

2. The character of the food had an evident influence upon the relative proportions of the several elements which enter into the composition of the milk. By an animal diet the amount of the solid matters was increased, and this increase was especially shown in an augmentation of fatty material. The increase of casein was less evident. The augmentation of these two substances in the milk was not merely relative but absolute; the daily amount of milk secreted being increased by animal food. The proportion of its albuminous and saline ingredients underwent scarcely any appreciable change. Under the use of an animal diet there was not detected any large reduction of the saccharine matter of the milk, as Beusch supposed to occur. Neither was the opinion confirmed by the experiments of Drs. Beusch, Playfair, and others that the fatty constituents of the milk are augmented by a vegetable, and diminished by an animal diet. By a change from an animal to a vegetable diet the quantity of the solid ingredients of the milk, namely, the fat and casein, was diminished, while the saccharine matter was somewhat increased. By fatty food the solid ingredients of the milk were but relatively increased, especially the butyraceous, while at the same time there was a decrease in the sugar.

3. The fact developed by the experiments of Dr. S., namely, that by animal food the quantity of butter in the milk is so much increased, would seem to prove that the fatty matter of the milk is formed, in a great measure at least, from the albumen.— *Vierteljahrschrift, f. d. Prakt. Heilk.*

On the 23rd of August, a statue to Laennec was inaugurated at Quimper, (Brittany), his native place, with imposing ceremonies. Orations were delivered on the part of the General Association of Physicians of France, of the Academy of Medicine, and of the Faculty of Medicine of Paris, of the profession at large, and of that of Brittany in particular, by Messrs. Tardieu, Roger, Bouillaud, Lediberder and Halleguen, respectively, followed by a grand banquet.

The discussion upon tuberculosis, which has occupied the attention of the Academy of Medicine (Paris) for several months past, and has elicited about all that is known about the matter, and more too, has at last been closed, but is likely to be re-awakened by the recent treatise of M. Villemin, in which he attempts to demonstrate the virulence and specificity of tuberculosis by establishing its analogy to glanders and syphilis, by means of inoculations; his conclusions, however, are disputed, and need confirmation.

M. Sichel (Paris) reports a case of encephaloid and melanotic tumor of the left orbit having crowded back and compressed the ocular globe. Extirpated by himself at his clinic, in 1859, resulting in apparent cure, followed by relapse after nine months, and a second extripation, and cauterization with chloride of zinc paste; the destruction by cancerous disease of the upper and internal portion of the orbital wall, which had not been subjected to the action of the zinc; the cerebral pulsations being visible through the encephaloid mass. The disease was again developed in its fullest intensity after two years (in 1861) and after a fall, from a wagon, upon the head, and again removed successfully in 1862. The learned professor reports the case as one of the most curious which has ever occurred to him in the course of his long and extensive practice.

Dr. Gent (Paris) reports the successful treatment of chlorosis by means of compressed air, attributing the success of this treatment to the increase in the respiratory capacity, by reason of the increased quantity of air

introduced into the lungs, and to the augmented hæmatosis, due to more perfect oxydation.

M. A. Desprès has observed at the Hospital "Lourcine," Paris, seven cases of phagedenic chancres of the rectum consecutive upon soft chancres or ulcerated mucous patches of the anus. He has moreover seen eight cases of soft chancres, and two cases of mucous patches of the anus converted into phagedenic chancres.

He describes in a memoir (*Archiv. de Med.*, March 1868) every stage of the disease from the ulceration rapidly arrested by strong cauterization, to ulcerative, and subsequently fibrous, strictures of the rectum.

The caustic preferred by M. Desprès is a saturated solution of chloride of zinc, introduced into the anus by means of a pledget of lint, etc., etc. The author moreover states that if the ulceration be extensive, stricture is inevitable, and that there is no means of radically curing stricture of the rectum.

M. Scoutetten, in a paper read before the Academy of Sciences (Paris), Aug. 3rd, contests the propriety of the application of the term *Electrolysis*, and demands the substitution therefor of *Electrical absorption*, to the operative process applied to the removal of tumors, by means of the continuous electrical current. He claims with Faraday that the term *Electrolysis* signifies decomposition by electrical agency, as *analysis* that by chemical agency — and demonstrates the impossibility of effecting a true decomposition or *Electrolysis*, under the alleged conditions, and asserts that the removal of the morbid product is due to true physiological absorption, the result of the stimulating influences of the current upon the enfeebled vitality of the vessels of the part.

M. Personne, pharmaceutist to the Hospital la Pitié, has presented to the Academy of Medicine (Paris) a treatise on the impurities of commercial Chloroform. Chloroform containing water, he asserts, will, when exposed to the solar rays, become acid and evolve very irritating white vapors. M. Marsche has recognized among the products of this decomposition, alcohol, chlorohydric ether, chlorohydric acid and especially a large quantity of chloroxy-carbonic acid gas. M. Personne has verified these observations, but according to him they do not result from the decomposition of pure chloroform; they are due to the presence of a foreign substance, chloroxy-carbonic ether, accidentally present. In order to present this alteration it is necessary to agitate with the chloroform an alkali stronger than the alkaline carbonates, for example, caustic soda or potassa.

PUBLISHER'S NOTICE.

We have at this office back numbers and volumes of the JOURNAL as follows:

Volume XVI (1859), all except the August number; Volume XVIII (1861), complete; Volume XIX (1862), February, March, June and July numbers; Volume XX (1863), complete; Volume XXI (1864), April, March, August, September, October, November and December numbers; Volume XXII (1865), all except July and August numbers; Volume XXIII (1866) complete; Volume XXIV (1867), complete; Volume XXV (1868), all except the number for January 15th.

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THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—NOVEMBER 1, 1868.—*No.* 21.

LEUCOCYTES.

Can they be developed spontaneously in Blastemata? Origin of Leucocytes found in the midst of Blastemata primarily amorphous, isolated in permeable receptacles. *By* M. LORTET, M.D., S.D.

TRANSLATED EXPRESSLY FOR THIS JOURNAL, BY WALTER HAY, M.D., ASSOCIATE EDITOR.

THERE are presented to us, at this time, two theories to explain the genesis of anatomical elements. The one assumes as its fundamental doctrine, that cell originates directly from cell; the other, on the contrary, admits that certain organized anatomical elements may originate spontaneously in amorphous blastemata, by and out of expense of the latter. If it were once thoroughly demonstrated that an organism as characteristic as the leucocyte, for example, could originate spontaneously in the midst of a liquid placed under certain particular conditions, this would certainly be a very important conquest by the defenders of the theory of generative blastemata. It is this especial point, moreover, already investigated by several physiologists, which constitutes the subject of this paper. In 1867, M. Onimus published, in the *Journal of Anatomy and Physiology* of Professor Robin, a memoir enti-

tled: "*Experiments upon the genesis of Leucocytes.*" The author affirms that in certain blastemata, entirely free from organized elements, enclosed in receptacles composed of organic membranes, and placed in the interior of wounds effected in animals, after a short interval of time, there are produced spontaneously leucocytes, well organized, and in great numbers. M. Onimus introduces, under the skin of rabbits, little sacs of gold-beaters' leaf, filled with the serosity from fresh blisters. Twelve hours afterward, the serosity is found still transparent, although it has lost its primitive yellow color: already several leucocytes and granulations may be observed. At the end of twenty-four hours, the serosity contains many granulations and leucocytes; after thirty-six hours, it is entirely white, and is composed solely of leucocytes and granulations. Moreover, M. Onimus asserts that, in order that the genesis of leucocytes should occur, it is necessary that the fibrine be not coagulated; for, according to him, neither leucocytes nor any other species of anatomical elements are formed in the serosity of a blister whose fibrine has been precipitated by coagulation. We shall perceive, later, how little the facts which we have observed harmonize with this opinion. From these different experiments M. Onimus deduces the spontaneous generation of leucocytes in fibrinous blastemata placed under peculiar conditions of temperature and of endosmosis.

These experiments are too important to pass by unnoticed; but already the investigations of M. Cohnheim (of Berlin) upon inflammation have enabled us to perceive that M. Onimus has been deceived, not only in his facts, but in the explanation which he gives of them. According to M. Cohnheim, in certain inflammations, leucocytes are not always the result of the proliferation of the nuclei of connective tissue. Frequently they are nothing else than those of the blood which have passed through the capillary walls. This phenomenon is easy to establish; if, in a frog poisoned by curare, the mesentery, irritated simply by contact with the air, be examined microscopically, leucocytes are seen to pass

slowly out of the vessels which contain them. So, also, in an inflamed tissue the vascular parietes become fitted to permit the passage of these little organisms, which does not occur in a physiological condition. The leucocytes are elongated, drawn out, bent, changed in form at every instant, just as true amæbæ, which they appear to be, and finish by means of these movements, by penetrating into the fabric of the tissues. In order that this phenomenon may be accomplished, it is necessary that these organisms should be living, or, rather, that they should be found in certain conditions of life, of temperature, and of medium, as we shall, in a moment, perceive.

On the other hand, the results of the experiments published by M. Chauveau in his investigations into the mode of penetration of virulent corpuscles into the organism—results demonstrating that leucocytes are introduced by myriads through membranes plunged into a medium loaded with leucocytes, might cast a doubt upon the truth of the theory of M. Onimus, for the capital importance of the fact affirmed by this physiologist, that is to say, the spontaneous generation in certain blastemata of bodies as highly organized as leucocytes, deserved, indeed, the most serious study. Moreover, in spite of the clearness of the differential results published by this author, according to the nature of the blastema introduced into the receptacles, we have considered it necessary to repeat those experiments, placing ourselves for that purpose in conditions free from any objection.

We have especially experimented with blastemata which we could be assured was a non-fibrinous liquid, and primarily entirely free from leucocytes. The animals upon which wounds were established for the purpose of experiment, were invariably horses and asses; the receptacles destined to contain the blastemata were either pouches made of gold-beaters' skin or the swimming bladders of finches or carps. Membranes which are almost purely fibrous, and whose walls contain no nuclei or cellules which could be confounded with leucocytes. The liquids, which we have placed in these organic vesicles, were,

1st. Pure egg-albumen, which contains only some filamentous traces, and a few vitelline cells.

2nd. Cerebro-spinal fluid, freshly taken from the horse. This liquid, examined carefully with the microscope, shows only a few scattered granules. By chemical tests, very little albumen could be detected.

3rd. Solutions of non-azotized substances, such as gum acacia and sugar. These solutions were carefully examined and exhibited nothing which could be mistaken for leucocytes.

4th. Distilled water.

5th. Bladders, filled with atmosphere only, have been introduced into the wounds.

Receptacles filled with these different liquids were placed in the interior of subcutaneous incisions, freshly made, in the flanks of horses or asses, and left, ordinarily, for twenty-four hours undisturbed. The bladders filled with albumen contained, after twelve hours, a very great number of leucocytes. After twenty-four hours the liquid was entirely purulent. The leucocytes were extremely numerous, large and well-preserved.

With the cerebro-spinal fluid there was the same result; complete purulence at the end of twenty-four hours. Many granulations. This liquid appeared to preserve admirably the leucocytes, which maintained, for a long time, all their typical characteristics.

With the solutions of gum acacia and of sugar, complete purulence after twenty-four hours. The leucocytes were likewise well preserved, but agglutinated amongst themselves into large patches.

With the distilled water, the same result. The liquid had become albuminous by endosmosis. The leucocytes were large and swollen, and their nuclei were very perceptible. Granulations were numerous.

Finally, when the receptacles are distended only with atmospheric air, the leucocytes penetrate as well into their interior. It is necessary, however, to be careful that the internal pressure be not too strong, otherwise the phenomena

of penetration are effected with difficulty. These receptacles of air are not filled up entirely, but exhibit only a few drops of pus in their interior, and their membranous walls are, in a manner, stuffed with leucocytes. The swimming bladders of fishes are especially favorable for the establishment of this last fact. They are entirely fibrous, and the fibres which compose them are extremely translucid. Indeed, after remaining twelve hours only in a bleeding wound, there may be seen, upon these bladders, large patches, broad, whitish zones of a milky whiteness, truly purulent. With the aid of the microscope there may be recognized, without difficulty, long lines of leucocytes, ranged one against the other, which are effecting a passage for themselves through the fibres of the tissue as if by violence. When the wound is entirely fresh, when it is very bloody, the receptacles contain, with the leucocytes, hæmatine in sometimes insufficiently large quantity to impart to the liquid contents a bright rose color. The hæmatine must originate from the destruction of a certain number of sanguineous globules; but never have we been able to perceive a single red globule penetrate into the interior of the receptacles.

The pressure exercised by the lips of the wound upon the liquid in which the receptacle is bathed, has evidently no influence upon the penetration of leucocytes. It is easy to relieve these receptacles of this compression by enclosing them in tubes of glass with two ends. In spite of this precaution, these little organisms no less freely introduce themselves into the receptacular cavity.

It is evident that pressure exercised upon the pus of the wound does not enter at all in the production of these phenomena of penetration. In order to be convinced of this, take the swimming bladder of a fish; evert it in such a manner that the internal surface becomes the external, fill it with pus and attach it firmly to one of the extremities of a U shaped tube, into the larger branch of which gently pour some mercury. With this apparatus it may be established that even under the pressure of nineteen centimetres of mercury, maintained

during twenty-four hours continuously, not a single leucocyte traverses the membranous pouch. Under augmented pressure the pouches are ruptured, but the purulent globules do not pass out. In order that this penetration might take place, it is evidently necessary that the leucocytes be found in certain conditions of temperature and of vitality. Thus, when the pouches are plunged into an old wound in which there is only creamy, old, and probably altered pus, very few leucocytes are found in their interior, although a small number may always be detected. In this case, however, the phenomena of endosmosis are effected equally well, since distilled water, placed in similar conditions, becomes strongly albuminous. And here is a circumstance extremely important to note, that the more recent and bloody the wound, the more rapid is the penetration, and the more numerous the leucocytes in the pouch.

From the preceding experiments the following conclusions may be deduced :

1st. In an amorphous blastema, enclosed in a permeable pouch, and placed under determinate conditions of osmosis and of temperature, then introduced into a purulent or sanguineous medium, there is no spontaneous generation of leucocytes, but these little organisms pass between the fibres of the membranes, in consequence of the facility with which they can change their form.

2nd. Pressure has no influence upon this penetration.

3rd. The character of the liquid contained within the pouches is altogether a matter of indifference.

4th. It is necessary, in order that the leucocytes may penetrate the membranes, that they be endowed with movements, (Sarcodigma), and that they should be placed in determinate conditions of temperature and vitality.

5th. Leucocytes contained in a recent and bloody wound, penetrate much more rapidly, and in much greater number, than those in an old and purulent wound.

M. Ranvier has made a certain number of experiments which come to the aid of the conclusions of M. Lortet. He

placed fragments of the pith of the elder tree under the skin of a certain number of animals, and has determined that leucocytes would penetrate into the interior of this pith from the periphery to the centre. M. Ranvier does not believe in the spontaneous organization of blastemata, but it must be noted that the experiments of M. Lortet, and his own, demonstrate only the facility with which leucocytes can penetrate certain tissue; they prove nothing against spontaneous generation in blastemata.

M. Legros has repeated, finally, the experiments of M. Onimus. He used sacks of gold-beaters' leaf, which had been previously tested under water by insufflation, and which appeared perfectly impermeable. He, moreover, made the experiment with dialyzing paper, and in every case obtained the same result as M. Onimus. He, therefore, believes in the spontaneous generation of leucocytes in blastemata, and asserts that the importance of the amæbori movements have been exaggerated. M. Cornil has been able to assure himself that the substances employed in these experiments, such as gold-beaters' leaf, dialyzing paper, etc., are impermeable only during the first hours of their detention in the liquid. At the end of a certain time they soften and become permeable. If they are examined with the microscope, there are invariably found in them openings, more or less extensive. By permitting a sack of gold-beaters' leaf to remain distended in a vessel filled with pus, the latter speedily insinuates itself through the membrane into the interior of the sack. M. Lortet has stated that, in his experiments, he took great precautions in order that the pouches used by him should be perfectly closed. He thinks, therefore, that in those cases especially on which he used the swimming bladders of fishes, the leucocytes insinuated themselves between the fibres of these bladders, in consequence of their amaboid properties, and by means of microscopic investigations of their walls, he has always been able to recognize lines of white globules passing from the external to the internal surface.

M. Hayem observes that, in the experiments undertaken

by M. Onimus and Legros, objection ought be made, not only to the receptacles, but also to the liquid considered as blastema. Indeed, M. Onimus asserts that the condition essential to the success of the experiment consists in the non-coagulation of the serosity. Now, M. Valpian assures us that the serum collected in the vesicles of blisters prevents constantly, at the end of about ten minutes, a fibrinous coagulum.

Moreover, the infiltration of the serum does not retain certainly all the white globules. It is well known that these can pass through a paper filter. There is therefore introduced into the gold-beater's leaf, not only a pretended blastema having already furnished a clot, but, in addition, a liquid containing, perhaps, a certain number of white globules. Moreover, M. Hayem believes, likewise, in the easy penetration of the gold-beater's leaf by the white globules; so that, in his opinion, the contents and the containing membrane are equally inappropriate for the demonstration of the fact which has been advanced.

M. Legros asserts that the serum of blisters coagulates only in a certain number of cases. He adds that the presence of leucocytes in the interior of membranes can be interpreted in a manner totally different from that proposed by M. Lortet.

MODERN TREATMENT OF ACUTE INTERNAL INFLAMMATIONS.

Extract from the annual address delivered before the Medical Society of the State of North Carolina, at its Fifteenth Annual Meeting, held at Warrenton, May 20th, 1868.

BY WM. A. B. NORCOM, M.D., OF EDENTON, N. C.

NOTHING so thoroughly arms a physician for his contest with disease, as a knowledge of its natural history, that he may be prepared to imitate and assist the curative changes

nature so constantly strives to effect. Our remedies can only avail in so far as they aid natural operations.

In a lecture delivered by Sir Wm. Fergusson,* at the Royal College of Surgeons of England, in June, 1865, I find the following:

"The loss of confidence in much-vaunted remedies seems, in some respects, like a loss or diminution in our appliances—an abstraction from our powers, as it were. But in my opinion the correct view to take here is, that we are acquiring a knowledge of our own ignorance — that we are beginning to see that we have placed our faith erroneously. In short, that we have been taking honor to ourselves for that which has been justly due to nature. We begin to see the difference between blind empiricism and natural processes."

Says Anstie,† on this point: "Without an observation of natural processes no medical man ever did great things for mankind, or for the advance of his art." * * * * "It was but yesterday that disease was universally regarded as some thing entirely foreign to the vital organism, which came to it from without, resided in it for a time, and then departed, exorcised by the physician's art. To-day we are inclined to take a less exalted view of our functions, to confess ourselves to be but the humble assistants in those curative processes which Nature herself initiates, and very often carries through without our help, or even in spite of our ignorant interference. Together with such changed ideas, there must come a revolution in our modes of therapeutical inquiry; and notably, a disposition to compare those instances of the beneficial action of drugs which are well authenticated, with similar effects *produced by the unaided operation of natural causes.* And it is surely lawful to hope that even partial success in this direction, may prove more advantageous to the progress of our art, than the most brilliant reasoning which should presuppose the physician's power to effect radical

* Richmond Medical Journal, vol. 1, page 37.

† Stimulants and Narcotics — Anstie.

alterations in the working of the vital agencies, whose operations we are only just beginning dimly and partially to understand."

And says Prof. P. Hughes Bennett:* "If every young practitioner would dedicate his life to the careful elucidation of the natural progress of only one disease, he would do more for medical practice than has been accomplished by centuries of empirical trials of remedies."

And Dr. Todd,† one of the brightest medical lights England ever produced, remarks thus: "Internal inflammations are cured, not by the ingesta administered, nor by the egesta promoted by the drugs of the physician, but by a natural process as distinct and definite as that process itself of abnormal nutrition to which we give the name of inflammation. Our interference either may aid, promote, and even accelerate this natural tendency to get well; or it may very seriously impair and retard, and even altogether stop, that salutary process."

Prof. T. Gaillard Thomas,‡ in a lecture to his class, in speaking of the natural history of disease, says: "Remain ignorant of it, and you shut the gates of the avenue which leads to progress in Medicine; master it, and your therapeutic knowledge will become certain, and its application a science." He further says, in the same lecture, as the result of experience: "If fifty cases of pleurisy (the disease for which Sydenham prescribed so vigorously) be placed in bed, carefully nursed, dieted, guarded from deleterious influences, and receive not a particle of medicine of any kind, the probabilities are that not one case would end fatally; all would likely recover, unless some peculiarity of constitution, the unfavorable age of the person, or accidental complication should alter the result."

How very liable we are to be deceived in regard to the power and efficacy of drugs! Suppose in these fifty cases of

* Bennett's Practice.'

† Clinical Lectures — by Beale.

‡ Richmond Medical Journal, vol. 1.

pleurisy, some harmless medicine had been given! It might have been proclaimed as a specific. Or, suppose mercury, so frequently given by many physicians in this disease, had been administered to these patients, they may all still have recovered, but certainly not so quickly, nor so well as under the conditions mentioned by Dr. Thomas.

And, says the popular and accomplished professor of Physiology, Hygiene and General Pathology in the University of Maryland:* "Now we substitute for the old compound prescriptions, simple remedies, given with a definite object, always recognizing the true position of nature as the curer, and medicine as her handmaid and assistant — laying great stress upon the observance of hygienic and sanitary laws."

Dr. Garrod† tells us that he has seen many cases of severe rheumatic fever get rapidly well without the use of drugs, and that on simply colored or camphor water the improvement is often very quick and decided. In the Guy's Hospital Reports for 1865,‡ are forty-one cases of rheumatic fever, thirty-seven treated by Dr. Gull, and four by Dr. G. O. Rees, "scarcely any medicine except mint water being given." Twenty-two were males, nineteen females; two only above the age of forty, the rest under thirty-five. The heart is mentioned as implicated in a large number of them. The average number of days from admission into hospital to complete convalescence was, for the males, sixteen, females twenty-one. The average duration of the acute symptoms in seven cases in which there was no evidence of the heart being involved, was eight days; in six cases in which the heart was decidedly affected, twenty-three days. From these cases what other inference can be drawn, except that mint water is a wonderful remedy for rheumatism, or that nature frequently triumphs over the disease? As mint water is known to be inert, we must accept the latter. Such facts as these should teach us a wholesome lesson. Suppose these cases had been salivated! Modern authors tell us that salivation neither

* Valedictory Lecture, delivered March 9th, 1867 — by Prof. Donaldson.
† Reynold's Essays of Medicine, vol. 1. ‡ Op. Cit.

shortens the duration of the disease, nor prevents cardiac complications. Then why practice it when, to say the least, the convalescence would necessarily be prolonged by the patient having to get well of the treatment as well as the disease? I mention this treatment particularly because I know that by many mercury is considered the "heroic" remedy in this as well as all other acute diseases.

By the foregoing remarks, I would not be understood to advise doing nothing for rheumatism; but we might learn the lesson to be careful in the use of powerful drugs, when the unaided powers of nature frequently effect a cure. In this disease, the alkaline treatment has proved highly successful.

A short time since, a lady of great intelligence told me that a few years ago she was treated for a pneumonia, the basis of which was *verat. viride* and low diet. Her medical attendant, a highly respectable physician, told her his object was to nauseate her to reduce her fever, which he very effectually did. She became cold, clammy, and almost pulseless. Active stimulation had to be resorted to, to save her from immediate death. She, however, finally recovered after a very tedious convalescence of six or eight weeks.

From an authentic source I heard of a case that occurred within a few years past, of bilious fever, which was terribly salivated. So offensive was the odor caused by the mortification consequent upon such ignorance and brutality, that one could not remain long in the room without sitting by a raised window. Yet this patient recovered, also, and was assured by the doctor that he would not have produced such a state of things, had it not been "necessary to save life."

Who can say that these remedies aided those patients to get well? A faithful report of the *convalescence* of such cases would be most interesting and instructive. Do not such recoveries, gentlemen, furnish a crowning demonstration of the great fact that Nature often triumphs over the doctor, and his treat ment, too? What wonderful wisdom and goodness is displayed by the Almighty in permitting this to be so! If

those only recovered who were properly treated, the inhabitants of this earth would grow less almost as rapidly as by a fiercely waged universal war. Call it what you may, the "*vis medicatrix naturæ*," or, as Dr. Dickson says, life itself, there is a resistive force—an inherent curative power—that frequently thwarts, in the language of Dr. Thomas, "the machinations of misguided men."

Dr. Forget says* that "Nature is stronger than physic and physicians; for if she were the slave of systems, the world would soon be a desert."

It is only by a careful and faithful study of her laws that we can hope to render to our patients that rational and effective aid, which it should always be the aim of the honest and conscientious votaries of our Heaven-born Art to give!

But let us pass on to alimentation. It has always seemed strange to me that nutritious food, so essential to maintain the organism in its integrity, should ever have been withheld in disease, at which time it is now proved to be so indispensable. When Nature is struggling to effect certain objects, which can not be effected by art alone, and without which recovery could not occur, how very reasonable that we should give her the aid afforded by this agent! The system, worn and wearied by disease, and the blood impoverished, need support and repair; and food, suited to the powers of digestion and wants of the system is, above all others, the remedial means suggested alike by science and common sense. If the position sought to be established by Dr. Chambers be correct, there can be no question of the propriety of food at the very inception of disease. It is this:† "That disease is, in all cases, not a *positive existence*, but a *negation;* not a *new access of action* but a deficiency; not a *manifestation of life*, but partial death; and therefore that the business of the physician is, directly or indirectly, not to *take away* material, but to add; not to *diminish function*, but to give it play; not to *weaken* life, but to renew life."

* North Carolina Medical Journal, October, 1860.

† Renewal of Life.

I beg leave to quote a few extracts from a paper on "Alimentation in Disease," by Prof. Austin Flint, Sr.,* read before the "Medical Society of the County of New York," January 6th, 1868.

Says he: "Certain it is that diseases, which do not compromise directly the function of either the heart or lungs, can not kill so long as the nutrition of the body is maintained at a point compatible with life. Starvation, associated with disease, may be inevitable; that is, the disease may involve an insuperable obstacle to either the ingestion or aliment, or its assimilation. Then it is that, in the language of Chossat, inanition may reach its termination sooner than the disease. On the other hand — and here is a fact full of practical import — starvation may not be a necessary effect of the existing disease, but may be due to insufficient alimentation. In such cases, inanition may prove a cause of death when the disease need not have destroyed life; the patient, indeed, may die of starvation, notwithstanding the progress of the disease *per se* be favorable. Then, in the language of Chossat, inanition 'reaches its natural termination later than the disease which it covertly accompanies, and it may supersede the disease of which, at first, it was merely an incidental element.'" * * * * * "In acute diseases the failure of the vital powers is forestalled in proportion as nutritive supplies are assimilated. This is simply saying that the assimilation of nourishment is indispensable for the preservation of the powers of life. And then, in the progress of an acute disease, more or less failure of the vital powers ensues, the more nutrition can be maintained, the more efficient the support." He further says that "Convalescence is protracted by the continuance of a liquid diet, and by an insufficient alimentation." Professors Barker, Jacobi and Noyes,† stated that their experience corroborated Dr. Flint's views, and Dr. Jacobi said that 'in children starvation is a very common

* New York Medical Journal, February, 1868.

† New York Medical Gazette, January 11th, 1868.

cause of death, rather than the disease from which they are suffering.'"

In the "*American Journal of Medical Sciences*," for January of this year, in an article written by him on "Inflammation, its Nature and Purposes," Dr. Jackson, in speaking of pneumonia, says: "Where the constitution of the patient is good, little more is required than to watch the course of the disease; the inflammation will take care of itself. It is the patient himself who is to be carefully looked to; his forces, which are to carry him through the conflict, are to be judiciously sustained, and all disturbing causes, moral and physical, guarded against. In cases of pneumonia, and where the antiphlogistic treatment had been fully carried out, convalescence is difficult and protracted. I have known two deaths to occur evidently from exhaustion. A limited portion of a lung had been the seat of disease, and was nearly restored to its natural state, and yet death took place with the disease extinct. Prof. G. B. Wood says there is reason to believe that in pneumonia, patients have been starved."

At the opening of the medical session at University College, London, October 1, 1867, Prof. Graily Hewett delivered the introductory address on "Nutrition, the Basis of the Treatment of Disease." I will make from it a few quotations bearing directly on this subject. "But do we adequately recognize it as a fundamental principle in the treatment of disease that food is the most powerful of remedies? * * * The prescription may be otherwise faultless, its different ingredients balanced to a nicety, but the life itself must be supported and sustained, and this can not be done without food.

"* * * * With some few exceptions, death is always preceded by exhaustion. The natural forces of the body become weakened in some way or other; another step downwards, and the body ceases to live. Its mechanism is some times so disturbed or disarranged, that resuscitation is in no way possible; but the mechanism being intact, the restorative power of food is great to an almost incredible extent. Nature

herself frequently suggests the remedy, calls loudly for food, and will not be denied. The indication is then plain enough. But where exhaustion is great, appetite gone, consciousness itself, perhaps, well nigh extinct; it is under these circumstances that a knowledge of the extraordinary remedial action of nourishment is of vital importance. To place within the alimentary tube some thing which it may easily take up, and which the body may, with what little power is still left to it, convert into new force — to do this at the right moment, and in the right way, is often an exercise of consummate skill and ability. The body is enabled thus to retain its hold on life. The deadly coldness gives place to genial warmth, the flickering pulse becomes steady, the light anew sparkles in the eye; for a time, at all events, the bitterness of death has passed."

Dr. Jackson once told me he thought there ought to be a professorship of the culinary art in every medical college, and that if physicians studied less about drugs, and more about alimentation, and the proper preparation of food for the sick, the result would tell decidedly for good upon their patients. Gentlemen, there is truth in this! How often are patients terribly drugged for diseases which could have been speedily cured simply by the observance of hygienic or dietic rules?

The late lamented Velpeau frequently remarked in his lectures that more than half the people who got sick thought they must have medicine to get well; and what is worse, as great a proportion of doctors think so too. I think it was Schonlein who said: "Good physicians often see no indication for treatment, bad ones never."

I conceive it to be our duty never to give medicine when it can possibly be dispensed with; and when needed, we should not give such as, by lowering vital power, will materially interfere with nature's curative processes. I would not have you think me a disbeliever in the propriety and efficacy of medicines timely and properly administered, but secondary in importance are they to food and hygienic laws.

Dr. John Clark, in a single hospital, saved more than six teen thousand children's lives by ventilation. What drugs could have done this? Just think, gentlemen, of the remedies that from time to time have been prescribed in typhus and typhoid fever!

In the lecture already referred to, Dr. Thomas tells us that a few years ago the Commissioners of Public Charities in New York, assured by the physicians of Bellevue Hospital, that pure air and nourishment were the proper remedies for these diseases, entrusted their management to Dr. A. L. Loomis of that city (the patients being placed in tents on an island in East River), and he thus writes to Dr. Thomas concerning them: "I have had charge of the typhus fever cases for five months; during this time not a particle of medicine and no stimulants have been employed, and the results have been one death in every sixteen and two-third cases; while, as you are aware, the percentage under the old plan was one in six. Dr. Murchison, a late English writer, states them in England as one in five. Medicine has never been able to do this. I mention these facts not to show the inutility of drugs, but the far greater importance of hygienic laws."

While the importance of ventilation is admitted by all, it is seldom properly practiced, and not unfrequently altogether neglected.

In regard to alcoholic stimulants, they are always indicated when there is failure of the powers of life, and may some times be given very largely to great advantage. Numerous authors relate cases that show their great value, and some in which very large quantities were given with decided benefit to the patient. I once gave an adult patient, with a severe and very extensive double-pleuro-pneumonia, very nearly a quart of whisky every twenty-four hours, for two weeks. During the whole of this time very little food was given, owing to the inability of the patient to retain it. Perfect recovery occurred, but in consequence of the previous bad health of the patient, and the extent of the disease, it was slow and protracted.

But, gentlemen, (lamentable is it to know!) there are those who, either ignorant of, or disregarding the golden truths and facts of Modern Medicine, cling to tradition and views long since utterly exploded, and vaunt the success of a practice opposed to physiology and pathology — yes, it seems to me, to common sense. I refer to the so-called antiphlogistic treatment, which originated long "ere modern physiology rent the veil of therapeutical empiricism," and the fatality of which is leading daily to its abandonment. This practice has no basis but tradition and empiricism. Scientific practice must have physiology for its basis. In the language of George Harley:* "A knowledge of organization, important though it be, is yet less indispensable to the physician than a knowledge of healthy function, for it is the latter which elucidates the dark problems of life, it is the latter which proves the golden key to the comprehension of disease." And says Chambers:† "Is it not then obvious that the only sure mode of arriving at a knowledge of the deficiencies of vital powers, or diseases, is by a knowledge of those powers of which they are deficiencies? The physiologist is the only true pathologist." And in part I, of Todd, Bowman and Beale's "Physiological Anatomy and Physiology of Man" the latter says: "Pathology is the physiology of disease; and, it is obvious, that no pathological doctrines can command confidence, which are not founded upon accurate views of the *natural* functions. It is also certain that improvements in pathology must follow in the wake of an advancing physiology."

Just here I will quote a little passage from Habershon on "The Injurious Effects of Mercury." Says he: "Any remedy that has been supposed to possess properties by which this so-called inflammation could be checked, has received the name antiphlogistic, and mercury stands foremost amongst them; but water or brandy often fulfill a similar purpose, and many agents possess equal power in this respect. This phraseology is a vestige of days of ignorance, and has only hypothesis to

* Harley on Jaundice. † Op. Cit.

rest upon. In medicine, however, we still retain the antiphlogistic remedy; and too often diseases are considered as conditions requiring to be smothered out, unfortunately also by frequently extinguishing the patient."

But let us examine more particularly into this subject, and see how irrational such a practice is. At the present day I am sure there could be found no bleeders like Clutterbuck, Rush, or Dewees, yet there are those who believe in the *curative* agency of the abstraction of blood by venesection. Its mechanical effects for good, no one will deny; yet, even here, Dr. Chambers tells us that the loss of this "liquid flesh" must be immediately compensated for by the administration of nutritive food; but it is indeed difficult to understand how venesection can exercise a *curative* effect upon the part inflamed. The attempt to cut short an inflammation by a large bleeding, early resorted to, is now so little practiced that I will not speak of it.

The question naturally arises, can general blood-letting diminish the amount of blood in the part inflamed? Yet this is not always necessary, as in pneumonia, where the cure is effected by cell-growth, to accomplish which an increased amount of blood is necessary. In inflammation, in consequence of injury to the *vaso-motor* nerves of the part, the vessels lose their contractile power, and become distended with blood, and stasis, owing to adhesiveness of the corpuscles, occurs, followed by exudation. No one pretends to say that general blood-letting can directly diminish the amount of blood in the part inflamed in external inflammation, and why should it in internal? It can only be done by such a large loss as would materially and alarmingly weaken the force of the heart, and then not more would probably be taken from the inflamed part than would be by the application of a single leech to an external inflammation, and all this time the inflammatory process goes on unaffected by the loss of blood. In the language of Markham, "Venesection is not a remedy for inflammations, but for the accidents of certain of them." In a word, it acts mechanically, and in this way may sometimes prove beneficial.

In pneumonia it is the custom with not a few to abstract blood locally by cups and leeches, when the anatomist shows that there is no direct anastomosis between the surface-vessels and those of the inflamed part. Hence it is plain that cupping or leeching the foot or back of the neck would do as well, so far as the loss of blood is concerned. Local depletion can only be beneficial where there is direct vascular connection between the surface from which blood is drawn and the part inflamed. When this does not exist, the good effected by such means is only through reflex action upon the vaso-motor nerves of the part.

Those who do bleed on antiphlogistic principles, do not do so to the extent practiced by their predecessors, and the majority of them are generally ready to assign as the reason for this, that these diseases have changed their type — that we are at present on an adynamic, asthenic tide — and patients can not bear the same losses of blood now as formerly. In this view some moderns agree with them. If this be so, it is passing strange that this change from strong to weak should have occurred nearly all over Europe and this country about the same time. The surgeon now-a-days does not say this about external inflammations; and if his patient should die from loss of blood, or a woman from excessive flooding after labor, he does not in the one case, nor the accoucheur in the other, invoke the change-of-type theory as a cause. And when large bleedings are now practiced, the same fatality occurs as formerly.

Mercury is not so lavishly given now in these diseases as in the past, yet by some it is not administered with a *very* sparing hand. Why is not the change-of-type theory invoked as a reason for this? But, gentlemen, it is not my purpose to discuss this subject; the real and true cause, however, of our change in practice is a better knowledge of these diseases, resulting from advance in pathology and improved methods of diagnosis.

But within the past few years there seems to be an abate-

ment of their sanguinary propensity in those even who bleed on purely antiphlogistic principles in acute inflammation, and they have betaken themselves to other remedies scarcely less powerful for evil. I refer to *Mercury* and *Tartar emetic*. Let us inquire into the action of these agents, particularly the former, and see if they produce a condition favorable to the object in view, and are sanctioned by the authority of those who have had the best opportunities of testing their merits.

"Mercury," says Headland,* (accepting the experiments of Wright,) "by some destructive agency, deprives the blood of one-third of its fibrin, one-seventh of its albumen, one-sixth or more of its globules, and at the same time loads it with a fœtid matter, the product of decomposition. Such power is possessed by few other medicines, and certainly exerted by none in the same degree as mercury. It is an agent of terrible activity, and we may well be cautious how we handle it. Mercury wastes the frame, causes the body to become thin and feeble, the face pallid, and diminishes the nervous energy." And Habershon says:† "After mercury has been taken for some time, the general nutrition of the body is impaired, the blood becomes darker, the coagulation of its fibrine less firm, and the proportionate quantity of serum increased, the red corpuscles are diminished, and the patient becomes thin and blanched. His tissues lose their proper tone, his muscles become flaccid, his energy diminished, and his nervous system enfeebled." And while admitting that serous effusions and abnormal deposits sometimes become absorbed under its influence, he further says "there is ample proof that the same can be effected by less injurious means, and that it sometimes happens that the diseased product becomes more abundant in quantity and less organized in character from the enfeebled nutritive action consequent on the mercury." He also says in acute pleuritis, pericarditis or peritonitis, it is the ordinary practice to give calomel so as to affect the gums, but that the

* Action of Medicines.

† Injurious effects of Mercury.

disease often subsides without any mercury, and very frequently the effusion steadily increases during salivation. He states that he has seen cardiac disease consequent upon rheumatism come on while the system is under the influence of mercury.

Tanner, in his work on the Practice of Medicine, says: "With regard to the use of mercury, there appears to be every reason to believe that its utility in controlling inflammation, or in promoting absorption of the effused products, has been very much overrated; and indeed it seems highly probable that inflammatory diseases will progress more favorably without the use of this medicine than with it."

The cases of pericarditis published in the London *Lancet* about twenty years ago, treated by Dr. John Taylor, without mercury, show the undeserved reputation this medicine has had in this disease, and subsequent observations by others confirm his results.

Dr. Todd says:* "No one would now venture to assert that mercurial influence, however quickly induced, ever checked pericarditis or pleurisy; nor would it be easy to adduce an instance in which, with any reasonable degree of certainty, it could be stated that mercury broke down adhesions, or prevented their occurrence."

Dr. Garrod, whose views are entitled to great respect, in treating of rheumatism, says:† "For many years I was in the constant habit of administering calomel in cases in which inflammation of the heart was present, but for the last eight or ten years, I have not done so as frequently, and have seen no reason to regret the change of practice; the cardiac inflammation appears to have yielded quite as readily, and the patient, on the subsidence of the fever, has not had to suffer from ptyalism in addition to debility."

One single case of rheumatic fever‡ in which pericarditis came on while the patient was salivated and proved fatal, seems to have caused Dr. Chambers to discontinue its use in

* Injurious effects of Mercury.

† Reynolds' System of Medicine, vol. 1.

‡ Op. Cit.

this disease, and in pneumonia he says that antimony and mercury, "pure destructives," "merely abet the worst effects of the disease."

Prof. Bennett and a great number of other modern scientific physicians, as strongly condemn this destructive agent as those from whom I have quoted. So small a proportion does the good bear to the ill effected by the administration of this drug in these diseases, that it would doubtless be better for the human race if its use in them could be entirely interdicted. Perhaps it may some times be used to advantage, but the deleterious results which follow its misuse, to be so frequently seen to, are enough to make the conscientious physician look, with a scrutinizing eye, for its real virtues. No remedy is more generally abused. In the malarial sections of this State, few persons can be found who, for a slight attack even of fever, do not think a dose of calomel or blue mass indispensable to "set the liver right," as they say, when quinine alone, or sometimes, perhaps, aided by some mild and gentle means, would be amply sufficient to effect the cure. The prostrating effects of such a course, aided by low diet, renders them prone to renewed attacks, which generally follow, and the autumn finds them weak, feeble and anæmic, and their blood loaded with black pigment. Should their vocation cause them to be much exposed in inclement weather, acute disease, probably pneumonia, attacks them, and the grim Messenger frequently sent to end their existence, doubtless thanks mercury for its timely and efficient aid in his work of destruction.

But I am digressing. I must pass on to my subject, and shall say a few words only in regard to *Tartar emetic.*

As a depressant, to lower the force of the heart, in the early stage of acute inflammation, this drug, though much less than formerly, is still prescribed after the plan of Rasori and Lænnac, though in not so large doses, not only by the adherents of antiphlogistic principles, but by some modern practitioners. The best success ever gained in the treatment of these affections has been by well-directed and persistent

efforts to *sustain* rather than depress the heart's action, and the total avoidance of depressing agents. Why depress the heart's action when it has been already done by the disease? And besides, the nausea occasioned by this remedy prevents the administration of food. Dr. Flint, in the paper from which I have already quoted, says: "Medicines not infrequently impair the appetite and interfere with digestion. If not required for a special curative effect, they are then likely to do harm by compromising, more or less, alimentation and nutrition." When, in the early stage of these affections, pain and dyspnœa imperatively demand relief, and the functions of the heart and lungs are seriously impeded, small bleedings from the arm may be practiced on mechanical principles, and when these are not admissible from fear of ulterior ill-effects, *Antimony* would not be a proper remedy. It is one of those destructive agents which Chambers calls, with mercury, in pneumonia, a poison, and we can not be too careful in its administration. Even Headland, who seems very partial to both antimony and mercury, says:* "Antimony deteriorates and impoverishes the blood in very much the same way as mercury."

Veratrum viride, a powerful cardiac depressant, is used by many for the same object as antimony; yet I am disposed to think that the effect produced by such agents is antagonistic to the principles of treatment pointed out by a correct pathology.

A few months ago I treated a child eight years old with a severe pneumonia—saw it twenty hours after the inception of the disease. At my first visit the pulse was 140, and respiration 70 to the minute. The treatment consisted in local warmth, an average of three pints of milk, one a half pints of rich soup with little alcoholic stimulus every twenty-four hours. No medicines were given except anodynes and diuretics. On the sixth day the child sat up by the fire, and on the tenth was dressed and walking about the house. I am sure this result would not have been accomplished by an

* Reynolds' system of Medicine, vol. 1.

antiphlogistic treatment—by depressing the little patient still more than had been done by the disease.

Let us bear in mind that there are no foreign forces to be attacked, nor is there an excess of vitality, but a deficiency of the powers which naturally reside in the organism. Indeed it may be that the cause of the attack which demands our aid is an already deficient vitality. I am every day more and more convinced that a recognition and observance of these important facts must form the basis of successful practice. Rather than being too intent on driving out the enemy, let us busy ourselves, as Dr. Bennett says, to secure the safety of the fortress — let us try to bring the individual *up* to his physiological status. In a word, let us help him to restore his *natural* powers. This support can only be given by food. As Dr. Hewett says: "Nutrition is the basis of the treatment of disease, and no other is possible for a rational system of medicine."

In the preface to his admirable little brochure on Hysteria, Mr. Skey says: "A weak condition of the animal body is intelligible enough, but an abnormal condition warranting a reduction of vital power by artificial agency I can not understand." Let us construct and support, not destroy and weaken.

The experiments of Hering and others show that in pathological increase of the heart's action, the rapidity of the general circulation is generally diminished. And M.M. Estor and St. Pierre have shown that the venous blood returning from an inflamed part is of a brighter color than ordinary venous blood, showing *suboxidation*. These facts certainly do not call for depressing agents in the treatment of inflammation. On the contrary they show diminished life. And besides, the general condition of the patient strongly indicates a lowered vitality. The least exertion frequently can not be borne even at the very inception of disease, and that which would be prejudicial to the normal life would very seriously affect the pathological state.

How different the practice we condemn from the one we adopt — the Restorative and Eliminative. Modern medicine teaches us that these affections can not be cut short, and that while we aid nature by the most nutritive food, and alcoholic stimulants when necessary, to bring about most important changes, we, at the same time, give such remedies as will assist in the removal of effete products by the emunctories. I refer, of course, to diuretics and diaphoretics. Rest in bed and support are necessary from the first; local warmth, local depletion, and blisters, sometimes, are most important remedies. Expectorants, so frequently given in pneumonia, are not generally called for, as the exudation-matter is in very great part removed in other ways; and, too, they frequently cause nausea, and thus offer an obstacle to alimentation. Cathartics, of course, are some times needed.

This practice is sneeringly denounced by some as "expectant." In reply to this I will quote the closing paragraph to Dr. Chambers' article on pneumonia, in his "Renewal of Life." "Doing nothing or leaving the patient to himself, would indeed be dishonest; but do we do so? Is it doing nothing to keep up constant relays of poultices night and day for a week or ten days? Is the enforcement of continuous nutrition no labor? Is there no anxiety and thought spent in hourly watching the need of variation in our doses of opium and wine for serious cases? Is the moistening warming the air to an even temperature not enough to occupy our time? Is it so much easier to support the waning life than to weaken it, that the former should be condemned as idleness, the latter praised as activity? If the pneumonia patient were left to himself, would he — could he — adopt any of the means suitable for his recovery? Would he not very likely be taking colocynth, senna, calomel, antimony, ipecacuanha, salines, senega, squill, hydrocyanic acid, colchicum, be rubbing in mercury, applying mustard poultices, and blisters, be bled "*coup sur coup*," or have brandy every half hour? Is it nothing to stand sentry against the fatal seductions of polypharmacy?"

This treatment, gentlemen, simple as it may seem, and indeed really is, is practiced by almost all modern scientific physicians, and they tell us its success far transcends every other. In addition to the actual saving of life, convalescence is very rapid after the disease subsides.

It is our duty to shake off the shackles of tradition, if they fetter us, and walk in the light of *to-day*. It is no easy task to get men to confess that they have been practicing error, and to adopt a treatment contrary to the teachings of their early years; yet in an incomplete and advancing science like ours, the physiologist, histologist and pathologist are constantly furnishing us new facts upon which to build a more successful practice.

PHILADELPHIA CORRESPONDENCE.

PHILADELPHIA, *Oct.* 19*th*, 1868.

Editor CHICAGO MEDICAL JOURNAL:

As in other branches of medicine and surgery, improvements, constant and important, have been rapidly made, so in the treatment of *uterine* diseases, both its surgical and its medical departments have progressed and improved most astonishingly. Whereas, not many years ago, all uterine diseases were placed under the head of "spine diseases," or "inward complaints," and the patients were drugged and dosed, and left in a condition worse than their previous one, and it was only now and then that a speculum, or a vaginal or uterine examination, even by touch, was thought of. How widely different is it now! A medical man's library is incomplete without the modern works on this class of diseases. How the writings of Bennet and Linus, Bedford, Hewitt, and Simpson, and others, enhance the value of one's medical shelves now! Those who, like Buck, of whom I have before spoken, in that in which he has ever been a specialist—sur-

gery—are of high order and merit, but who, like him, have too contracted views of other special diseases to see their importance, and who, probably, have made but a very limited observation among these diseases, pronounce *all* who engage in this class of practice, "*enthusiasts*" and "*hobbyists!*" Heaven knows, the mothers and wives of this and every country, would be far better, had many of them placed themselves in the hands of *such enthusiasts* long ago. Take, for instance, that class of uterine disorders so common among women — ulceration of the os uteri. Pointed out by its universal and constitutional symptoms — pain in lumbo-sacral region, constipated bowels generally, pain on top of head, etc.; a class of symptoms formerly, and even now, far too commonly calling in aid revulsives of all characters, and *alteratives;*—how simple is its cure! Statistics are the best proofs of any matter. I find I have recorded in my notes, the histories of one hundred and ninety-one cases of ulcerated os uteri. These, I have gathered from clinical and private practice. Many of them, indeed, the larger number, were those of a tedious, chronic character, the subjects having suffered for a period of years, and many of them having been under *constant* use of medicine internally. Of these, *every one was cured* by local interference. In one hundred and two cases, *Arg. nit.* was used; in forty cases, Monsell's solution was applied; in twenty-three, *Sulphate of Copper;* and in the remaining fourteen, *Tinc. Iodine.* The number of visits ranged from two to sixteen in each case, these being the minimum and maximum number. Is not this array of facts *alone* enough to induce practitioners more generally to adopt these means of cure?

Take, again, the subject of inflamed uteri—a disease pointed out by constitutional symptoms similar to the above, together with continued constipated bowels. An examination *per vagina* will reveal an angry, red uterus, hypertrophied, not unfrequently, to a very great extent. Among my notes, I have the history of ninety-seven cases of this character, of a duration ranging from three months, to a period not less than

fifteen years. Some of the subjects are absolute burdens to themselves. Of these, eighty-three were *completely cured;* while the remaining fourteen were more or less relieved. The treatment was by means of *Arg. nit.*, *Caustic Potassa*, and sponge-tents. And in discussing this portion of my subject, I shall close this letter.

In the treatment of this form of uterine disease, the cure is very commonly attained by the first-named drug, *Arg. nit.;* but the objection is very properly advanced that it is slow in its action, and this objection is a valid one. I find, while the same patients would not object to taking medicine internally, from month to month, they object decidedly to being operated on for a long time; and the use of *Nitrate of Silver* necessitates this, often, though a deep and large eschar is made on one or both lips of the uterus. To remedy the difficulty, *Caustic Potassa* has been used; and this has a very decided objection, in its great escharotic power. I have used this drug in two cases well adapted for its use, and in both cases have been disappointed. The result, though *sooner* gained than by the use of *Arg. Nit.* is not of enough increased proportionate value to reward one for the great pains required in its use. Its corrosive effect is so decided and rapid, that it requires the most careful attention, with the liberal use of *Acetic acid*, and no little time. The third and last means I have mentioned, I can not commend in too high terms. I have, prior to this letter, cited several cases illustrative of its value, and I hope ere long to publish a monogram, giving concisely, and yet fully, the histories of the numerous cases which have fallen under my notice, as affording indubitable evidence of the value of the tent as a means of cure. A sponge tent, suitable for every purpose, is readily made by any physician, and can easily be formed into various sizes. I have seen it used (in my own and clinical practice) in sixty-four cases of hypertrophied uteri, and have yet to see a single case where it fails in its use. It seems to melt down a hypertrophy at times almost like magic. A tent is introduced through the internal os, up the entire uterine canal, and

allowed to remain twenty-four hours. It is then removed, and a larger one introduced, and it will rarely happen that the hypertrophy is not decidedly decreased by the forty-eighth hour. These tents, to be sure, are not without their evil effects. Like *Calomel*, they produce serious mischief some times. Acute metritis will occasionally, but rarely, follow. If it is necessary to use a disinfectant, the tent can readily be medicated by *Per-manganate of potash* or *Carbolic acid.* I shall resume this subject in my next. Yours,

E. R. HUTCHINS.

EDITORIAL.

Apologetic.

THE EDITOR begs pardon of the readers of the JOURNAL for having recently referred to a semi (or more) quack institution and its "organ" in the city of Cincinnati. At the time the paragraphs referred to were written, he supposed each to have a certain amount of respectability. Recent developments have shown that neither is possessed of this desirable quality.

This reminds us of an anecdote we heard many years ago from the lips of the Rev. Lyman Beecher, the father of all the Beechers. It was in the quaint, old-fashioned town of Middlebury, Vermont, before a college literary society with which we were then connected. The old gentleman, in paternal style, was advising us to weigh well the character of an antagonist before we engaged in a controversy with him. "Once upon a time," said he, "I was walking along the road in the evening with an old black letter volume under my arm, the contents of which I had, just before, been carefully conning. A few steps in front of me I saw a little black and white animal crossing the way. Without a moment's reflection I hurled the whole quarto volume at him, and —*got teh worst of the bargain!*"

The editor regrets exceedingly that a few weeks since he did not happen to recollect the moral conveyed in Dr. Beecher's entertaining experience. We promise not to defile our pages with any more of the odor of the *Cincinnati Medical Repertory*.

Gettysburg Katalysine Water.

Our attention has been called to the general interest on the subject of Mineral Spring Waters, and while we do not accept the many extravagant statements of interested parties respecting the medicinal value of these newly discovered springs, we regard the subject as eminently worthy the attention of medical men, aside from the claims put forth by those actuated mainly by pecuniary motives. There is ample evidence given upon high professional authority, of the demonstrated curative powers known to exist in many of the mineral waters in this country, and a great number in different places on the continent of Europe.

These latter have, in some instances, such as the Baden Baden, Vichy, and others, as well as our own Saratoga Springs, attained a reputation by long continued use and application to many diseases not always as successfully treated by medicines artificially compounded according to the best theories and practice known to the profession.

We should do injustice to the real claims of these natural fountains of healing waters, if we omit to say that our conviction is, that much of the prevalent ignorance on this subject among even the most scientific men in the medical profession, is the result of a prejudice on account of the empirical modes adopted to influence the purchase and sale of mineral waters.

In these remarks, we wish to be understood as referring only to *natural waters*, in distinction from artificial waters manufactured, as is pretended, by formulæ derived from analyses of natural springs. Such productions are, at best, a mere approximation to the original, and the best writers do not admit the possibility of any artificial combination which

can exhibit the demonstrated therapeutic agency which resides in the natural combination, since the most delicate chemical tests fail to detect the subtle elements which are the real secret of the peculiar success not unfreqnently attained by the intelligent and proper application of mineral waters.

Statements which come to us on good authority, respecting the medicinal properties of the Gettysburg Katalysine Water, as shown by many and repeated trials, seem clearly to indicate that this Water possesses remarkable curative powers, especially in cases of uric and lithic acid conditions, resulting in rheumatism, gout, and diseases of the renal apparatus generally, and its effects in these cases, as well as in dyspepsia and general prostration of the vital powers of the system, are such as to claim the attention of those whose complaints, as above, indicate its application as a remedy. While this Water is almost tasteless, like ordinary spring water, its effects, in cases of irritation of the kidneys and bladder, extending through the urethra, and even chronic affections of this nature, frequently yield by the use only of a gill of the Water at a time, and this three times a day. The discharges become less acrid, and the incipient calculi and uric formations are rapidly solved, and pass off in quantities according to the accumulations present.

All that the proprietors of this Water ask or claim, is the use of the Water, daily, as above suggested, for a sufficient length of time to control the acid tendency, and thereby restore the mucous surfaces to their normal condition, meanwhile, it is stated, the superior curative powers of the Water will be demonstrated to the satisfaction of both invalid and physician.

It appears a fortunate peculiarity that from its peculiar composition, this Water is unaffected by climate or exposure.

As we learn that many of the medical profession are testing the Water in this city, we shall be pleased to hear more of its effects in treatment generally.

A variety of editorial matter, items, etc., unavoidably crowded out of the present number.

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—NOVEMBER 15, 1868.—*No.* 22.

THE VIRULENCE AND SPECIFICITY OF TUBERCULOSIS.

Read before the Academy of Sciences (Paris) by DR. J. A. VILLEMIN, *Professor of the School of Val de Grâce.*

TRANSLATED EXPRESSLY FOR THIS JOURNAL, BY WALTER HAY, M.D., ASSOCIATE EDITOR.

GENTLEMEN: The unexpected discovery to which my studies of, and my investigations into the subject of tuberculosis have conducted me, has had the good fortune to originate in this Academy a discussion the most brilliant, and which will also prove the most fruitful; for the attention which it has attracted without, will provoke abroad as well as in France, numerous experiments which will soon dissipate completely whatever doubts might remain in some minds, even about the fact of inoculation; whilst the objections formulated at this epoch against the virulence and the specificity of tuberculosis will circumscribe, by clearly designating, the mooted points in this question of doctrine.

As to myself, whose works have enjoyed the distinguished honor of occasioning these discussions, whilst this subject is yet fresh in every mind, I come, with profound sentiments

of respect and gratitude, to beg the Academy to permit me to examine, in a very few words, the various difficulties which are opposed to the inoculation of tuberculosis, to its virulence, and consequently to its specificity.

Let us note carefully, first of all, the experimental fact which is the basis of every discussion. If there be made in the ear of a rabbit, in the groin or the axilla of a dog, upon a small surface previously shaved, a subcutaneous wound so small, so shallow, that it affords not the least atom of blood, and if into this there be insinuated, in such a manner that it can not escape therefrom, a particle, as large as the head of a pin, of tubercular matter taken from a human subject, from a cow, or from a rabbit already become tuberculous; or yet, if with a syringe of Pravas, there be instilled under the skin of an animal a few drops of phthisical expectoration diluted by admixture with a little water, the results which may be observed are the following:

The day after the operation, the most careful palpation can no longer detect any trace of the inoculated matter, the edges of the wound are agglutinated. Subsequently, at the end of four or five days or longer, there is developed a slight tumefaction, accompanied sometimes by redness and by heat, and there is perceived the progressive development of local tubercle, which varies from the size of a grain of mustard to that of a filbert. When it attains a certain size, it usually ulcerates. In certain cases there occurs an inflammatory reaction which undergoes resolution or gives origin to a slight suppuration.

When the animals are examined *post mortem*, it is seen that the tubercles at the point of inoculation constitute a caseous mass, around which are often seen little yellowish granulations, which are frequently disseminated to a considerable distance throughout the intermuscular connective tissue. The lymphatic glands in communication with the wounds of the inoculations are frequently tumefied, studded with tubercular granules and nodules, sometimes even verging upon complete caseous transformation. Finally there

may be observed in some cases an alteration of the lymphatic vessels which unite the glands to the local tubercles, their walls thicken, being transformed into tubercular tissue, their calibre is contracted at the points, infiltrated with granulations; lymph extravasated in their course undergoes inspissation and the vessel then forms a solid cord analogous to those presented by the chyle ducts of phthisical subjects who have likewise tubercles or ulcerations of the intestinal mucous membrane. This alteration recalls completely the farcy-cord (*corde farcineuse*) of the glandered horse, and it will be perceived subsequently that experiment confirms this analogy.

During the period immediately succeeding the inoculation, the animals manifest no appreciable alteration in their health, and it is only at the end of ten, twenty, or thirty days that they are seen to become thin, to lose appetite, and the sprightliness and vivacity of appearance. Some of them, after having declined during a certain time, resume a comparative rotundity. Others continue to become progressively enfeebled, fall into a state of marasmus, frequently are seized with colliquative diarrhœa, and die in a state of extreme emaciation.

Hence, we can not comprehend why it is pretended that the evolution of experimental tuberculosis differs from that of human phthisis; that in destroying the animals it is by no means certain that it led to their death as does the latter, which admits the reservation of doubts about the nature of the lesions consecutive to inoculation.

If the experiments which we have just narrated, as well as those of several other observers, be carefully considered, it will be perceived that the animals inoculated may be divided into two groups. The first comprehends those which have fallen victims to the very sequences of phthisis and in a degree of marasmus which justifies the name of this malady. Death may be explained as well by asphyxia due to the innumerable quantity of tubercles which infiltrated the lungs and their cavities, as by the digestive disturbances resulting from the tuberculization of the mesenteric glands and of the

intestine, by intestinal hæmorrhages, sequences of tubercular ulcers, by the general deposition of tubercles in all the organs, and, finally, by the consumption peculiar to this disease. Here is, I think, an entire series of fatal terminations which impress upon experimental tuberculosis the true seal of spontaneous tuberculosis as observed in man.

As to the second group, comprehending those animals which were killed, it may be asked if a certain number of these would not have died later if they had been permitted to live. This is more than probable. Some also would have been really cured, which is by no means opposed to what we know of tuberculosis. And should there be found a greater number of cures amongst these animals than amongst men, would this constitute a radical differential characteristic? And, in addition, would it not be necessary to take into the consideration those cases in which the inoculation was not successful, which, as in every inoculable disease, occurs occasionally. We certainly believe ourselves right in affirming that the inoculated tuberculosis has the same progress and the same termination as human phthisis. Like it, it exhibits every degree of intensity from the acute general eruptions, which carry off their subjects in a very short space of time, to those examples of circumscribed tuberculization of indefinite duration. At the autopsies of animals which have died or have been killed, the existence of tubercles generally throughout the lungs has been determined. The law of Louis is tolerably uniform. Amongst the already very considerable number of our own observations we have scarcely met with even five or six exceptions in favor of the lymphatic glands and of the intestine. Pulmonary tubercles are encountered of all dimensions, from the finest granulations up to masses of infiltration occupying a large portion of the organ. The tuberculous eruption does not confine itself to the lungs. It occurs more or less abundantly in the lymphatic glands, the intestine, the liver, the spleen, the kidneys, etc. Frequently the organs are stuffed with it. The serous membranes, especially the epiloon and the mesentery, are sometimes

studded with innumerable granulations, according to the epoch from which the inoculation is dated, and the greater or less rapidity with which the eruption manifests itself there are found tubercles gray, transparent, yellow, cheesy or soft cavities, or ulcerations.

When the animals are killed before the fifteenth day, it is rare that the tubercles are found in the organs; there elapses, then, between the moment of inoculation and that of the tuberculous eruption, a certain period of time which seems to us to vary from ten to twenty days approximately. Inoculation ormed upon rabbits generally succeeds; we may say that in our hands it has given results about eight times out of ten. Upon dogs it appears to succeed less frequently. As a larger part of our experiments was made upon rabbits, for reasons which are easily perceived, it has been objected that what we regard as a consequence of the inoculation might be only a coincidence, the rabbit being reputed frequently tuberculous. This assertion is absolutely contrary to every-day observation; in spite of habitual confinement, in spite of the tortures to which it is subjected by vivisectors, the rabbit is almost never phthisical. I have seen more than a hundred lungs of these rodents in the markets, and I have found none tuberculous. The frequency of tuberculosis in the rabbit is an error which is repeated from mouth to mouth, it has been very much credited by Dupuy, who took for tubercle the white matter sometimes contained in cystic pouches of the peritoneum, as well as the transparent or caseous nodules of the liver, in the midst of which are distinguished oviform bodies or cysticerci.* I refer, upon this point, moreover, with the most absolute confidence to the testimony of physiologists. At the commencement of my experiments, I myself participated in this prejudice; thus, in order to protect myself from the objection which it might originate, I have arranged parallel and comparative series of animals between which, origin, age, conditions of residence, and of nourishment, indeed every

* Dupuy de l'affection tuberculeuse, etc., Paris, 1817.

thing except the fact of the inoculation, should be perfectly identical.

We have just a moment since seen that tuberculous matter deposited under the skin effects around itself and upon the channels which it traverses, a true contamination. It excites the formation of tubercles in the subcutaneous cellular tissue in the walls of the lymphatic vessels, in the glands, and in the entire economy. But as the development of tubercles in the splanchnic organs has appeared to us to occur only after the appearance of local phenomena, and to supervene only after a certain number of days subsequent to the insertion of the tuberculous matter, we have compared this period of *silence* to that which has been termed the *incubation* of virulent maladies.

We next propose this question, which is suggested *apropos* of syphilis: May not local tubercle, like chancre, a primary phenomenon, be the source of ulterior accidents?

To these facts, and to the interpretation which we have given of them, different views and conceptions have been opposed. The development of a local lesion has been denied, and it has been asserted that the tuberculous mass, found at the point of inoculation, was a relic of the matter inoculated; that this matter, passing gradually through the lymphatics, would only arrive at the lungs at the end of several weeks, and that we were wrong in applying the term incubation to the time consumed in carrying it to its destination. As a consequence of this explanation, the tubercles developed in the organs have been considered as constituted principally by the inoculated matter transposed mechanically and in substance, and it has been affirmed that the intensity of the tuberculization was proportioned to the quantity of tuberculous substance deposited under the skin. But this mode of considering the subject appears to us not to conform to the observation of facts. When into an elevation of the size of a pin's head there is inserted the bulk even of a mustard seed of tuberculous substance, and when, at the end of two months, it is found at the same spot of the size of a filbert, it is evidently

impossible to regard this latter as a remainder of that which was deposited there. When a hyperdermic injection is made of some drops of expectoration diluted with water or with defibrinated blood, and when there are established in the cellular tissue into which these liquids have been instilled, granulations and tuberculous masses, it can not be claimed that these are the relics, can be the relics of the substances inoculated. Must we believe that this blood serum, this expectoration has occupied twenty or thirty days in traversing the net-work of lymphatics? No, these liquids are absorbed almost immediately, and the tuberculous matter itself does not remain long in the wound; the next day it is no longer to be detected. The tubercles found later, in the cellular tissue, in the walls of the lymphatic vessels, in the glands, are productions of new formation; they do not represent the inoculated matter, which they exceed a hundred times in volume in certain cases. This applies *a fortiori* to those of the internal organs whose abundance is so great at times, that certain viscera consist of little else than tuberculous masses. Led by our investigations to the idea that tuberculosis was a specific disease, and desiring to verify the hypothesis of its inoculability, we have endeavored, from the beginning, to realize the conditions of every true inoculation, that is to say: *a very small wound* and an inconsiderable quantity of inoculated matter. We have never yet departed from this method of proceeding, and all our inoculations have been performed with a quantity of tuberculous matter varying from the size of a pin's head to that of a grain of mustard seed at the most. In spite of this constant uniformity in the process and in the volume of the inoculated substance, we have obtained tuberculizations excessively variable in their intensity and in their generalization. All degrees have been offered to our observation, from a few scattered granulations to frightful generalizations, in which nearly all the organs were stuffed with the pathological product peculiar to tuberculosis. Manifest proof that *the intensity of the tuberculization is completely independent of the quantity of matter*

inoculated. The question of quantity, it seems to us, can not be invoked as in the inoculations of blood, in which success appears to us to demand a certain volume of this liquid, which, moreover, is in harmony with what we know concerning other diseases, syphilis particularly.

It is also by making use of the lesions of ganglia and of the lymphatics near the point of inoculation, that it has been desired to explain the formation of tubercles in organs by a sort of propagation, step by step, from local tubercle. But this tubercle is often, very often, very small, and the alteration of the ganglia and of the lymphatic vessels especially is far from being constant. In some subjects affected with abundant tuberculization of the viscera, the lymphatics are frequently found without any alteration, and the tubercle at the place of inoculation altogether rudimentary. The number and extent of the internal lesions have no reference to the development of the local lesions of the puncture. As, moreover, progressive development would suppose the absence of every interruption between the point of arrival and that of departure, and would demand a connection impossible even to imagine, uniting the point of inoculation to the lungs, to the spleen, to the kidneys, to the peritoneum, etc., the tuberculization of ganglia in the vicinity of the wound of inoculation offers nothing astonishing. In animals as well as in men, the cause of tubercle has a manifest affinity for the lymphatic glandular system, and it is often demonstrated that those glands which could not have been affected by the direct passage of the inoculated matter are thoroughly tuberculous, the mesenteric glands amongst others. In fact the phenomena occur in a manner altogether similar in the inoculations of syphilis and glanders.

Hence we consider it wrong to invoke in aid of this explanation the well known results of tattooing. It is well known that individuals who bear upon their arms indelible designs of various colors, have the axillary glands penetrated and colored by the mineral substances employed. Experiment having demonstrated that the pigmentary matter of a melan-

otic tumor, and even of the normal choroid, comports itself in the same manner as do colors in tattooing, these have been quoted as examples of what occurs in the inoculation of tubercle. But we think that a fragment of tubercular matter of the size of a millet seed, which, introduced under the skin, induces consumption and death at the end of a few months after having stuffed all the organs with tubercles, does not constitute a phenomenon comparable to the penetration of the tissue by coloring matter; for then it would be necessary to place in the same category the impregnation of bone by madder.

It has been attempted also to explain the transmission of tubercle by a graft; but how would a graft account for the myriads of tuberculous granulations which stud the parenchymatous and serous organs? Engrafted tissues continue to live and to develop in the place in which they are deposited, but they do not reproduce themselves elsewhere in the organism. The insertion of periosteum under the skin has never caused the development of bone in the lungs, the kidneys, nor the peritoneum. This theory would explain abundantly the development of tubercle at the place of inoculation, but still it would be necessary for this purpose that the tuberculous matter inoculated should be constituted of elements endowed with very active life. Now, when the softened substance from the center of a tubercle is taken, it no longer contains morphological elements. Only detritus is inoculated. How then can it be supposed that tubercle furnished by a dead body, abandoned by life for thirty-six hours, can be susceptible of revivification and pullulation with that degree of activity which characterizes a tuberculous eruption? How is it possible to explain by a graft the inoculation of expectorated matter, of expectoration dessicated during twenty days, as we have done, in experiments yet unpublished? Does not all this prove that the inoculated matter acts in virtue of a principle independent of the histological elements which enter into its composition? To suppose that these elements are carried into the lymphatic ducts, and implant

themselves, and flourish and multiply in different regions of the economy, is to grant to them gratuitously, contrary to physiological laws, the possibility of traversing the glands. This is to attribute to caseous matter, softened from living organisms, what it no longer possesses. It is to concede to this excrementitious morbid product, as well as to expectorated matter and to blood serum, an imaginary life. When we inoculated tubercular matter taken from the human subject, it was asserted that the results obtained were cadaveric phenomena. When we inoculated fresh tubercle from recently killed animals, it is claimed to be a graft.

Finally, must we consider this entire chain of phenomena observed in experimental tuberculosis as the result of traumatic irritation produced by the inoculation? We can not convince ourselves of it. A simple incision into the skin made with the point of a bistoury with a narrow blade, *without effusion of blood*, the puncture of the thin, smooth point of a Iravas syringe, are wounds so slight that very few animals have had the current of their life interrupted by accidental lesions of so inconsiderable extent. It has been asked if the lesions produced in the viscera as sequences of the inoculation of tuberculous matter, were indeed tuberculous. This doubt, legitimate at an earlier day, is hardly admissible now, since so many physiologists have decided upon the absolute identity of the tubercles of inoculated animals and those of man. Not only does the naked eye nor the microscope detect no difference between these two pathological productions, but there is also the fact, which bears in itself proof irrefutable, and of much higher value than a micrographic examination, that the inoculation of the tubercle furnished by experiment, reproduces tuberculosis just as that which is furnished by man.

Not only is there to be found sometimes in man, but especially frequently in animals, a whole category of lesions which have the greatest resemblance to the anatomical manifestations of tuberculosis. They are represented by little nodules, gray, transparent, yellowish, white, caseous, or even

by masses more or less extensive of the same appearance. They owe their origin to vegetable or animal parasites. We have elsewhere given to this subject all the development of which it is capable. These lesions have frequently such a resemblance to those of tuberculosis, that for a long time observers have advanced the idea that tubercle had its point of departure in parasites, (Jenner, Dupey, Baron, Kuhn). This opinion has never had many partisans; but in confounding the parasitic pseudo-tubercles with the true tubercles of phthisis, great obscurity has been thrown upon the subject of animal tuberculosis. We are persuaded that into this question of inoculability, there have been insinuated many errors suggesting the presence of parasites. The confusion which exists amidst the different alterations of appearance of tuberculosis developed spontaneously, extends itself to lesions provoked by experiment.

Thus the effects of the *inoculation* of tubercle have been identified with those of the injection into the bronchi and into the veins of powders, of mercury, of fat, of irritating substances of different sorts, and even of pus. In this manner is the inoculability and specificity of tuberculosis opposed, by arguments based upon experiments which are in no respect comparable to inoculation, either in their mode of execution, in their pathogenic action, or in their final result.

When foreign substances, such as those I have just named, are injected into the veins, processes are established in the lungs, in appearance more or less analogous to that of tuberculosis, and whose mechanism is readily explained. These bodies drawn immediately into the circulatory current are carried first to the heart, thence are projected into the lung, where they give origin, according to the calibre of the obstructed vessels, to emboli, to pneumonic nuclei, or to little circumscribed irritative processes similar to the irritant bodies themselves. These processes, at the beginning of their formation, are constituted of a connective tissue, new, and rich in nuclear elements, which have the greatest resemblance to those of tubercle. It is, in fact, what the Germans

have designated *granular tissue;* it terminates either by the formation of little purulent foci, or very often by a little nodule, gray, fibrous, and transparent, and representing an isolated point of interstitial *cirrhotic* pneumonia. It is in the midst of these pseudo-tubercles that is found encysted the irritant substance when it is solid.

There is thus produced what is formed every where, in all tissues, around foreign bodies. In the lungs of game there are found nodules of similar character, but more voluminous, and forming envelopes around small shot which have been buried therein, but have not been sufficient to cause death. But these lesions are never generalized; their number corresponds to that of the pulverulent masses which are lodged in the organs; they are formed by means of a mechanism similar to that of tubercles occasioned by worms.

The grains of dust, mercury, etc., provoking around themselves the same inflammatory processes, as the microscopic larvæ of those parasites which are so frequently met with in certain animals. Have these alterations the least relation with tuberculosis? Can the injection of pulverulent irritating obstructing substances into the circulatory current, be compared to an inoculation, that is to say, to the introduction of a minute particle of tuberculous matter into a wound so small, so superficial, that it rarely yields the smallest drop of blood?

If we had just announced that we had caused the development of tubercles by injecting tuberculous matter into the vessels of our animals, our assertion would not have deserved the honor of a discussion in the midst of this learned assembly; the thing would not have been new, moreover, for the results given by such experiments have been known for a long time. They have been reproduced by all those who have studied experimentally the subject of embolism: Virchow, Panum, Cornil and Trasbot, Damoschino, etc. Bilbroth, attempting to transmit cancer by injecting into the veins the detritus of a tumor, found twice, little nodules in the lungs of the animals, but he is very doubtful whether to consider them as cancerous productions or tubercles, although

they exhibited a striking resemblance to the latter: he interprets these formations as they should be. "There are found in the lungs," says he, "certain little nodules of the size of a pin's head, containing fibres of connective tissue, relics of pulmonary emboli." * The injection of foreign bodies into the veins certainly gives origin to pseudo-tubercles in the lungs, but these lesions are not found elsewhere. It is, perhaps, always possible for very fine powders and irritating liquids to penetrate the capillaries of the lungs, and to diffuse themselves through the general circulation. But I can not be certain that this has actually occurred with any other substance than pus. The results of the inoculation of tubercle are quite otherwise; the appearance of certain epiploæ studded with myriads of granulations subsequent to an inoculation should suffice to clear away the most obstinate doubts. But since, to these foreign substances, there is attributed the singular property of originating a lesion which differs in no respect from that of tuberculosis, let these powders, these granules of mercury, these fatty matters, be inoculated in small quantities as we inoculate tubercles, and it will be seen whether they ever provoke in the organism a morbid generalization of tuberculous nature.

It is, likewise, by relying upon the effects induced by the injection of pus into the veins, and upon the supposed migration of a large quantity of the inoculated matter, which would be regarded as recoverable in the organism, that it has been attempted to detect in the inoculation of tubercle something comparable to purulent infection, we do not believe that we should insist upon this objection; purulent resorption, with its lesions and its symptoms, is one thing, tuberculosis, with its peculiar progress and processes is another. It must be remembered, nevertheless, that the little purulent metastatic foci of the lung, liver, and kidney, has been sometimes mistaken for tubercle.

Pus injected into the vessels acts in two modes: it behaves, on the one hand, as an irritant substance, by determining

* Bilbroth — Gazette Hebdomadaire, 1867, p. 717.

little inflammatory foci, indicated by a cellular proliferation, terminating by suppuration, or by the creation of fibrous nodules; on the other hand, it acts as embolic dust by the accumulation of its globules in the sanguineous capillaries. From this may be perceived the signification of the two experiments made by M. Lebert in 1851, and which have been quoted against us. The pseudo-tubercles obtained after repeated injections of pus into the vessels were, as M. Lebert himself says, a result altogether exceptional amongst the numerous experiments of this kind, and accompanied by marked symptoms of purulent infection. Indeed, there is no question which has occupied more the attention of physicians than this of purulent infection. For many years nearly all the observers who have written upon this subject (and they have been very numerous), have attempted to sustain their views by experiment; hundreds of animals have been injected and inoculated with pus of all sorts, and it has never been seen to provoke tubercles nor tuberculosis. If so important a phenomenon had manifested itself, it could not assuredly have passed unrecognized. Especially should there be nothing impossible in the assumption that pus taken from a phthisical subject should originate tubercles; for already do the expectorations and the blood of these subjects induce these results. We can not too clearly arouse attention to this fact which might account for certain divergences, by advising that inoculations be restricted to this morbid product, pure and simple, and by the disuse of injections into the vessels, whose effects would inevitably suggest, as has just been indicated, a double interpretation.

From what precedes, does there not arise the conviction that there is reproduced, by means of experiment, two sorts of lesions, corresponding to those which are found in the natural state? On the one hand, true tubercles by the inoculation of tuberculous matter; on the other, pseudo-tubercles, by the injection of irritating substances into the bronchi and into the veins. To confound these two orders of facts, is as though one should desire, under pretext of far-fetched analo-

gies, to identify the pustules of antimonial friction with those of variola, or the rubefaction from a coarse brush with that of scarlatina. But it has been objected to us, how can tubercle be considered as a virulent matter, since the inoculation of other substances, such as cancer, pus, etc., can produce tubercles; since it is even possible to develop them from wounds, such as the application of setons? We have repeated these experiments; we have inoculated pus of every sort, and various pathological products; we have applied setons, etc., and thus far we have observed nothing which resembled tuberculosis. Cancer, amongst the rest, has been inoculated by a considerable number of experimenters, and none have confirmed, I think, the results of two experiments which have reached us—the one from Germany (Lebert), the other from England (Clark) — announcing the production of tubercle from cancerous matter. But far be from us the intention to deny, *a priori*, results of this character, or the desire to weaken them by our negative experiments. On the contrary, we think it necessary to devote ourselves to their study and mastery, and we shall probably discover their explanation.

These facts are not the only ones which do not adapt themselves perfectly to our theories of virulence and specificity. We shall see, hereafter, that *experiments, entirely similar*, oppose their results, contradictory to the virulence and specificity of glanders; and who now contests that glanders is an inoculable disease, and both virulent and specific? However this may be, the generalization of tuberculosis in certain animals, subsequent to the insertion under the skin of a minute particle of tuberculous matter, is an experimental fact whose constancy is almost absolute; and since it can be explained neither by the transportation, pure and simple, of the matter deposited in the wound, nor by the effect of embolic processes, nor by the communication, step by step, from a local phlegmasia of the wound to the organs where new tubercles burst forth, nor by grafting, nor by traumatic infection, we are driven to the necessary conclusion that the fact accomplished is a true inoculation. Has it not, moreover, all

the characteristics of the other examples of inoculation which experimental pathology furnish? Does not this particle of morbid matter introduced into an organism reproduce there the disease by which it was engendered, and an identical morbid matter, since this latter, inserted in its turn in a living subject, will reproduce therein the same, and so on, continuously? If the name inoculation be refused to this experiment, what does it show, and in what does it differ therefrom? And if this can not be done, how can the propriety of affirming the inoculability of tubercle be contested? Perhaps, however, indeed, it may be conceded, tubercle is inoculable; but take care that from this inoculability its virulence be not also inferred.

But what does this mean, gentlemen, have we not, all of us, believed, hitherto, that inoculation constituted the pathognomonic characteristic of virulence? And this word virulence, is it any other than the expression which comprehends the effects of the inoculation of a morbid substance reproducing itself with the matter which has engendered it? It is conceded, it may still be said at this time, that every virulent malady is not inoculable by the lancet; but to assert that a disease may be inoculable and not virulent, is to perpetrate an absolute contradiction in terms and in thought so long as the word virus shall be employed in its accustomed acceptation.

Moreover, it is asserted that tuberculosis can be neither virulent or specific, because "tubercle is heterogeneous, because it originates in a disease primitively and essentially organic and diathetic; because it possesses properties remarkably deadly; because it is a product incapable, in the highest degree, of the force of incubation, of latent vitality and refractory, in virtue of which virus and contagions preserve and communicate their properties, without regard to space or time; because nothing has less vitality and concentrates less morbid activity than tubercle, etc. etc.;" and hence, tuberculosis is neither virulent, nor specific, nor contagious. To this reasoning, I

think, I have replied. Can not tubercle be virulent? I inoculate it.

But it is answered, "your inoculations, performed with the aid of solid materials for histological elements, have, to the inoculations hitherto performed, only an external and deceptive resemblance . . . . Up to the present time, inoculation had been performed with true liquids—liquids called virulent, products of virulent diseases. These liquids, examined with the microscope and submitted to chemical analysis, exhibited no morphological elements, nor peculiar characteristics."

If by true liquids are to be understood those which contain no morphological elements, we scarcely know any of these in the organism; perhaps the urine, and yet more, mucus, pus, and blood contain histological elements in as great abundance as tubercle; vaccine, variola, syphilis, glanders, inoculating themselves with products rich in morphological elements, should, therefore, cease to be inoculable diseases; moreover, Depaul has recently inoculated vaccine with solid crust of cow-pock; the contents of the variolous pustule comprises microscopic elements in abundance; the indurated chancre of syphilis has the same histological structure as tubercle, and the detritus, which its ulceration produces, is physically identical with that from an ulcerated or softened tubercle. The tumor of glanders, which gives rise to ulcers of the pituitary surface, has likewise the same composition and even the same evolution as tubercle. Further than this, experimenters inoculate the granulations from glandered lungs or from other organs, exactly as we inoculate tuberculous granulations. We discover the evidence of this narrated in a very interesting work of M. St. Cyr.*

"I inoculated," he says, "this mare with the virus of acute glanders taken from the *pulmonary tubercles* of an ass."†

* St. Cyr, *Nouvelles études historiques, critiques, et experimentales sur la contagion de la morve.* Paris, 1864, p. 72.

† We make the remark, cursorily, that in spite of the zoological relationship between the ass and the horse, acute glanders is observed in the first of these solipeds only, whilst chronic glanders is exceedingly frequent

It must not be forgotten that these tubercles of glanders are, anatomically, almost identical with those of phthisis, so that it is very difficult to distinguish them either by the naked eye or with the microscope. They have the same seat, the same structure, the same degrees of evolution, the same terminations, etc. Read the notes of autopsies of glandered horses by experts, such as Dupuy, St. Cyr, etc. They are genuine transcripts of our phthisical autopsies, and there is recognized in them even *lobular caseous pneumonia.* Now, I do not perceive that tuberculosis can be more *primitively and essentially organic and diathetic* than glanders. The tubercles of this latter are *heterogenetic* in the same manner as those of the former. Glander tubercles possess, perhaps, properties more *surely destructive to life* than phthisical, while, in many cases, their softening appears more rapid and premature. Are they more largely endowed than the former with *inoculable force*, with latent and refractory vitality? Do they concentrate a greater morbid activity? We humbly acknowledge that we have no conception of such properties.

But upon this point the evidence appears incontestable, that all the accumulated reasoning against the virulence and the specificity and the inoculability of phthisical tubercle applies, step by step, to the tubercle of glanders, and the tumors of farcy; and if our opponent should contend that farcy is not inoculable, we refer them to Gohier,* Rayer,† M. St. Cyr,‡ and as many more.

Doubtless, the greater number of inoculations of glanders have been made with the *foam* of the horse; but tuberculosis likewise is inoculated with the expectorations of the *phthisical*,

in the second. This is a curious peculiarity which should not be lost sight of in practising inoculations of virulent diseases, which may exhibit different manifestations, as is here observed, according to the species of animal inoculated.

* Gohier, *Mémoires et observations sur la chirurgirie et la médicine vétérinaire*, Paris, 1813, t. t, p. 439.

† Rayer, *De la morve et du farcin chez l'homme*, Paris, 1837.

‡ St. Cyr. loc. cit., p. 77.

true foam, having a composition entirely identical with that of glanders. We ask recognition for experiments made with this product. Shall the characteristics of a virulent liquid be assigned to the foam of the solipeds, and withheld from expectorated matter? Or, indeed, does virulent and specific tuberculosis with expectorations cease to be so because tubercle is inoculable.

CARCINOMA OF THE SPLEEN.

BY V. R. BRIDGES, M.D., MATTOON, ILL.

HARVEY TREMBLE, native of Ohio, house carpenter, aged fifty-five years, ordinarily enjoyed good health, till during the winter of 1867–68, when he began to suffer somewhat from a sense of weariness, and aching in the left hypochondrium and across the stomach. While working at the bench would often have occasion to stop and straighten himself up, in order to relieve a "stitch or cramp," as he said, "in the short ribs;" otherwise his general health was unimpaired. On the 27th of April last, he called on Dr. W. E. Morris, of this place, for advice in relation to a vague uneasiness about his system; referred mainly to his left side and stomach. Dr. M. examined the case, prescribed an anodyne at bed-time, and gave him, perhaps, an antacid, with some general directions as to the care of his person, and he went away satisfied, but returned again in a few days with the same symptoms. The doctor prescribed again with similar results. He was finally called to his house, found him in bed somewhat debilitated, with variable appetite, some restlessness, and having pain in the left iliac fossa, and along the course of the descending colon, with constipated bowels. He prescribed an alterative, with a mustard plaster over the lower bowels. He was visited from day to day without observing but little change. He would occasionally have some fever, with manifest periodicity, when *Quinine* would be given with fair

results. In the progress of the case he was seized with severe pain in the lumbar region, when anodynes and diuretics were given, and a blister applied over the kidneys. This afforded temporary relief. Finally, upon a more careful examination of the case, a remarkable prominence was observed in the left hypochondrium beneath the ribs, which were made to form the arc of a much greater circle than those of the opposite side. The tumor was of great density, and not very painful on pressure; no discoloration. He could rest quite easy in any position, his appetite somewhat improved, and he had no fever, except at intervals of from three to five days. The pain in the back ceased to trouble him much; some tenderness along the descending colon; bowels now easily controlled; no sickness at the stomach, but looks pale, or of a leaden color, and is somewhat emaciated.

TREATMENT.— Occasional alteratives and chalybeate tonics; counter irritation over tumor in the side; nutritious diet, and gentle exercise in the open air. At this time, May 27th, Dr. Morris expressed doubts as to the exact character of the disease, and desired me to visit the case with him. We each gave the case a thorough examination, and after watching it carefully and maturely considering the pathological changes, and interchanging opinions for a series of days, we came to the conclusion that the disease was malignant; in other words, was carcinoma of some of the viscera of the left side, but were not very decided as to the exact organ; were inclined to believe it was in the splenic arch of the colon. Having become satisfied of the malignant nature of the lesion, we could do no more than to give a palliative treatment. Not willing wholly to abandon a hope of benefiting the patient, we called together a number of the more prominent members of the profession in the city, for counsel. The consultation substantially sustained us in our opinion, though some were inclined to a different view, and that not without reasons which claimed our consideration. Of the result of the interview we advised the patient, and expressed to him

freely, for the first time, our opinion, and advised him of the probable result of his case, and the course of treatment for the future. We expressed to him a willingness for him to call in any other counsel he might desire, or to make an entirechange if he wished, assuring him that we would watch the progress of the case, and improve any opportunity that might present itself for relieving him. The case passed on for several days without material change, save the gradual enlarging of the tumor. He was now visited by his brother, Dr. J. Tremble, of Salisbury, and Dr. H. R. Allen, of Charleston, and after examination, Dr. A. pronounced the case one amenable to treatment, and prescribed *Iodide of potassium* internally, and a plaster of the *Proto-iodide of mercury* externally over the tumor. Disposed to give the patient the benefit of every doubt, we placed him on the treatment at once, and continued it till its inefficiency was demonstrated, and we thought to withdraw it. Nevertheless, Dr. Trower of Charleston being in the city, visited the case with us, and being inclined to corroborate the opinion of Dr. Allen as to its non-malignancy, suggested that we substitute the *Bromide of potassium*, and persist in the treatment a little longer. We did so without any perceptible effect for good whatever. On the contrary, the tumor gradually enlarged, becoming more and more dense, and less sensible to pain on pressure, somewhat moderated and occupying now nearly the entire left half of abdominal cavity. It is proper to say that for some time previous to this our minds had been diverted to the *spleen* as the primitive seat of disease, and that all other organs involved, were so merely as a consequence of the adhesive nature of the malady. There would be, from time to time, several days of febrile excitement, consequent upon adhesive inflammation, during which time he would suffer greatly with acute lancinating pain through the tumor, together with great restlessness. From about the middle of June he suffered somewhat from an inability to swallow fluids, and would usually not be able to get more than a gill of water into the stomach at once, and that not without more than ordinary effort. Nothing unusual

occurred in the case until about the 10th of July, when he was seized with sickness at the stomach, and ejected quite a quantity of blood, and soon afterwards discharged blood quite freely from the bowels; otherwise the bowels were quite easily controlled. The treatment was wholly palliative, and the diet such as he most desired, preference being given to that which contained the most nutritive and the least refuse matter. Long continued pressure on the iliac veins began now to induce œdema of the leg on the left side, which soon extended to the abdomen, and, in fact, to give evidence of dropsical effusion throughout all the tissues. All hope of recovery was now abandoned by the patient and his friends, until the evening before he died, when, at the suggestion of some of our well-to-do citizens, he was visited by an old quack from Terre Haute, Indiana, calling himself Dr. Delamater, advertising largely, and claiming to have an extensive practice in Illinois. I was notified of his august presence, and, on my arrival, found that he had already examined the patient and persuaded the friends that there was yet hope, and by knowing winks, nods, and inuendoes, had wrested from beneath the countenance of the now dying yet conscious man, a strange approving smile. Under a protest as forcible as I could deliver on the occasion, I was subjected to the humiliation of seeing the man put on treatment by this old ignoramus — a treatment at once pointless, aimless and foolish, if not criminal. *Aloes*, *Rhei*, and *Mur. ammonia* internally, and blister, tapping, scarification, etc., externally. The patient died the next day, August 9th, from perforation and hæmorrhage of the stomach, as shown by the *post mortem*, which I conducted twenty hours after death, assisted by Drs. Morris, J. W. Dora, Treat, and Girard, a brief synopsis of which I subjoin, from notes prepared by Dr. Dora at the time. *Rigor mortis* not well marked. Upon opening the cavity of the abdomen, the stomach, transverse colon, and, in fact, all the viscera of the cavity were more or less displaced toward the right side, the left being filled by the diseased mass. The appearance of the alimentary canal as exposed,

at first view, was rather healthy. It was not diseased except when it was contiguous to the diseased tissue. After we examined and laid that aside, the spleen was found to be almost entirely transformed into a schirrus mass, with scarcely the resemblance of an organ of any kind. Only the inferior portion could be recognized as normal, and that was of a deep purple, and quite dense. The superior portion and body of the organ were entirely metamorphosed, the internal structure being broken down and puriform, and near the superior extremity protruded the diseased substance proper. It emanated from the organ in the form of an excrescence overlapping it and adhering to it, or, rather, involving the substance and becoming a part of the organ itself. The adhesions were very extensive, involving the liver, stomach, transverse and descending colon, duodenum, pancreas, left kidney, diaphragm, anterior walls of the chest, cartilage of the sternum and ribs, intercostal muscles and pericardium. The left lobe of the liver presented evidence of a previous inflammation, was now softened and slightly gangrenous, and adhered by its under surface to the stomach, which was perforated and filled with dark grumous blood. This took place immediately preceding, and was doubtless the cause of death. The coats of the stomach, duodenum, and colon, except at the points of adhesion, were in a fair state of preservation. The pancreas was very much enlarged and carcinomatous. The kidneys were both softened and friable, the right more so than the left. The omentum was entirely metamorphosed, and the transverse meso-colon gangrenous. The mesentery was in a state of congestion, and the mesenteric glands atrophied and gangrenous. The lungs were atrophied, melanotic, friable, and easily torn. The heart and all other organs examined were normal, except, perhaps, that feeble condition of tissue consequent upon defective nutrition. I removed the spleen, and so much of the adjacent tissue as was most completely metamorphosed, and examined it apart from the cadaver. Its physical appearance was somewhat nodulated, of a dull, white color externally, cheese-like in consistence, melanotic

internally, and weighed ten pounds. When cut through, a sand-like reaction was apparent, and the divided surface resembled in some degree that of fibro-cartilage. I regret that for want of an instrument of sufficient power, I am unable to give the result of a microscopic examination. In conclusion, it will be remembered that carcinoma of the spleen is a very rare occurrence, and only that our minds had recently been drawn out on the subject of carcinoma, we should have failed, perhaps, to make a diagnosis so easily, but though it be a coincidence rarely met with in a country practice in so short a time, this is the second case we have attended the present year. The other was that of Mr. Philip A. Crow, who died of cancer of the stomach in January last, and upon whose body I conducted a *post mortem* in the presence of Drs. Morris, Dora, and Wilcox, an account of which will be found reported by Dr. J. W. Dora in the JOURNAL for March 1st, 1868. A very striking similarity is found to exist in the more prominent symptoms of the two cases.

EXPERIMENTS ON CALCULI, IN AND OUT OF THE BODY, ETC.

BY T. WILLIAMS, M.D., MILWAUKEE, WIS.

To the Editors CHICAGO MEDICAL JOURNAL:

THE following cases may be of some interest to your readers:

CASE 1.—John Placer, æt. 37, sandy hair, and sanguine complexion, applied to me early in May, 1868, for treatment. Had been troubled with rheumatism since 1864, owing to exposure during the war; ankles and knee joints were considerably swollen, but not so much as to prevent his walking with a cane, without crutches. For the past six months had suffered a good deal with his back; pain, with a sense of fullness in the left kidney, especially before rising in the

morning. For the past few days the pain had increased in the left kidney, and the sense of constriction and fullness was not relieved, as had previously been the case, on urinating. The pain was constant, and at times excruciating. He voided nearly the usual quantity of urine each day. The left testicle was painful and retracted, and there was a peculiarly unpleasant and annoying sensation in the base of the glans penis. On examination of the urine, it was found to be strongly acid. Renal calculi, supposed to be of uric acid, was diagnosed.

The bowels were opened freely with a saline draught; this was followed by thirty drops of deodorized fluid *Opium*, four times daily, and the patient was directed to take a tea-spoonfull of Coxe's "Hive Syrup" every two hours, preceded by a hot bath lasting one hour. The effect of this treatment was to give relief from the most urgent symptoms in about twenty-four hours. The testicle became pendant, but was preternaturally tender; the urine passed much more copiously than for several days, and the pain and fullness in the lumbar region subsided, owing probably to relaxation of the ureter at its exit from the pelvis of the gland, where the calculus was probably impacted. A mustard poultice was put over the kidney, until it blistered; the surface was dressed with savine ointment, which proved very irritating, and kept the spot quite sore.

The patient was kept on alkaline remedies, which kept the urine neutral or alkaline, until the first of September, three months; during this time his joints were rubbed with liniments, laved with alkaline solutions, blistered and poulticed persistently; the bowels were kept regular with alkaline laxatives, enemata, etc., and the state of the digestive organs improved with *Iron* and tonics. But on the first of September it was discouraging and vexatious to find the patient not one whit better than when he commenced. Frequently during this time the renal trouble had returned, and the same measures had to be resorted to repeatedly for its relief; the trouble in the back always returned. The result of this

case, so far, had been quite similar to many others treated on the alkaline plan. I never could get the fine results from it that they do in the hospitals. I felt, in fact, disgusted with such poor results. If the theory is correct that rheumatism depends upon acidity of the circulation, it ought to be cured at all times, readily, by the administration of alkalies; and this is doubtless the proper mode of treatment in a certain type of cases in which some vice of the system causes the production of more uric acid than combines with the basic alkalines. The administration of lime, soda, etc., in these cases corrects the trouble for the time being, but does it remove the vice on which the disproportionate production of acid depends?

There seems to be another type of cases met with, which are due to a deficiency of acid, or an undue production of alkalies. It is certainly as preposterous to give alkalies in rheumatism and gout, with chalky or carbonate of lime deposits in the joints, as to administer alkalies for phosphate urinary deposits. In such cases, the alkaline element, not meeting sufficient acid to combine with, is left free, and is stranded in the joints, kidneys, liver, and heart, in greater or lesser quantities, giving rise to unendurable pains of a rheumatic or neuralgic chaaacter.

With these views, I commenced to give my patient *Phosphoric acid*, dilutum, twenty drops, three times a day, half hour before meals, in two ounces of *distilled* water. (This acid, from the extreme readiness with which it combines with lime, should never be administered in hard water.) For although his urine was naturally acid, it did not seem to exert any solvent power on the deposits of his system; and alkalies had proved equally useless. The patient's urine, on leaving off the alkalies and commencing the *Phosphoric acid*, became acid again within twenty-four hours; and from that time his improvement became marked and regular. About the first of October, he had several fits of the gravel, during which three small calculi, weighing respectively 5 grains, 3 grains, and 2 grains, passed down into the bladder

·e voided with the urine, (suitable precautions having
·n to secure this result), after intense suffering.
peedy and great relief experienced in the kidney
ely after the expulsion of the calculi. The patient's
atism had gradually improved, so that he felt better in
imbs than he had for near four years. The *Phosphoric acid* was continued, and sulphurated baths prescribed every other day. (At first 1½ ounces to the bath, gradually increased up to 3½.) The pain in the glans disappeared after the passage of the calculi. My theory is that the *Phosphoric acid* dissolved the little projections and virus of the calculi, allowing their expulsion.

I possessed no means of making a chemical analysis of these calculi, but they were very hard, uneven, and had the appearance of uric calculi. It occurred to me to make some experiments on the solubility. I placed the large one in dilute *Sulphuric acid*; the next largest in liquor *Potassæ*, and the smallest in "Katalysine Water" from the Gettysburgh (Pa.) spring, claimed to possess a solvent power over calculi *in the body*. Twenty-four hours afterwards, the stones were just as when put in; the one in *Sulphuric acid* harder, if anything, than ever. I in turn placed them in a strong solution of *Iodide potassium*, *Sulphuric and Nitric ether*, alcohol, solutions of lime and of *Soda*, saliva, and gastric juice, (from a calf), without affecting their visible or sensible properties in the least. It is therefore fair to presume that none of these agents, internally administered, and necessarily largely diluted, would have affected them. I next tried the officinal *acidum phosphoricum dilutum*, which dissolved them all, with effervescence, in about twelve hours. The solution of the calculi in the acid gave it a peculiar but indescribable taste, reminding one of the odor of musk. The patient used nothing after September 1st but the acid and baths, and, when last seen, (November 1st, 1868,) was apparently over his rheumatism, though the joints remained a little stiff.

Case 2 will be more briefly referred to. The patient was a professional man, (a lawyer), whose business was

purely intellectual. He had a well balanced and active brain; was a close student and an industrious scholar. The occasion of his consulting me was a fear which he entertained that he should fall a victim to softening of the brain, to which he thought he was exposed on account of the incessant activity of that organ. Mornings, he felt well, but when he went to his office and got to work hard, (writing briefs, etc.), the part of the head corresponding to the cerebrum would begin to feel *light;* a kind of dizzy, "foolish" feeling, free from ache or throbbing; and he would become quite nervous and tremulous. As the day wore on he could not work at all for this queer feeling in his head, and toward evening could not even read the daily paper without experiencing it. The slightest mental application seemed to affect him. Here was evidently a case in which the brain was denied a due proportion of some element necessary to its healthy action. The nervous mass, when employed in the complex operations concerned in the elimination of *thought*, consumes vast quantities of phosphorus. I suspected that this element was wanting. On further inquiry I learned that some alkaline mineral waters, which had been recommended to him as a tonic by a former medical adviser, perceptibly increased the trouble. The patient's urine was phosphatic. Here again the phosphoric acid of the system combining with the alkaline basis of the waters, still further diminished the supply the struggling brain so much needed. I directed these waters to be discontinued, and prescribed *Pyrophosphate of Iron* and dilute *Phosphoric acid*, with the effect of giving *immediate* relief. The patient prepared an able brief the same day he commenced this treatment without experiencing any of the head symptoms, but a resort to the mineral water, or the neglect of the acid, would any day insure their return. The phosphates disappeared from the urine, and it became acid within twelve hours.

In this age of great mental activity, there is an enormous expenditure of nervous force and vitality which induces physical debility and premature old age. No one cause,

perhaps not all other caeses combined, contributes so much to abbreviating the space of human life. The average of life has steadily decreased from Noah down, and this decrease has kept pace with the advance of intellectual vigor and activity. I am much inclined to think that many modern physical organizations suffer materially for the lack of phosphorus, and that all of that article consumed in the manufacture of lucifer matches is needed by the brains of the present generation! Many weak, small framed and weak boned persons owe their physical degeneracy to the absence of a sufficient amount of phosphates during growth. The phosphates of iron, soda, potassa, and lime are more frequently indicated than is generally supposed. I have even thought that the growing tendency to indulge in beer and other malt liquors may arise from the deficiency of phosphorus, creating a kind of craving for a stimulant, not satisfied by cold water, and only temporarily by liquors, but seems to be satisfied by a draught of an acidulous nature. Many an overworked brain is given beer when it asks for phosphoric acid.

EDITORIAL.

Prof. E. S. Carr,

Of Madison, Wisconsin, whilom our preceptor in the beautiful science of Chemistry, and known in honor and high esteem by old graduates and students of Castleton, Albany, Philadelphia, and Rush Medical College, we understand is about to visit and perhaps remove to San Francisco. We take the highest pleasure in commending him to the courtesies and friendship of all "to whom these letters may come" in the occidental and earthquake regions. Unsurpassed as a private instructor or public lecturer on Chemistry, Geology, and other Natural Sciences, he combines with this those genial qualities of heart which cement friendships never to be sundered.

Hegeman & Co.

Will accept our thanks for exquisite specimens of Cod Liver Oil and the Elixirs of Calisaya and Ferrated Calisaya. It would seem impossible to surpass them in perfection of preparation.

Rush Medical College Library and Reading Room.

We are requested to return the thanks of the faculty and students to the editors of medical journals and publishers of medical books who have, with great liberality, furnished their productions to the reading room of the college. Each is appropriately acknowledged at the rooms, and a list has been furnished us for publication, but unfortunately, it is crowded out of the present number.

J. Brown, M.D., now at Ashton, Lee Co., Ill., wishes us to change the address of his JOURNAL to that place, from his former residence.

As we have *fourteen* J. Brown, M.D's on our list, will he be kind enough to say where he removed from?

Erratum. In the haste of writing, on the first line of page 670, of THE JOURNAL, we inadvertently put down *Henry* instead of *Hughes*, as every one knows it should have been written. We beg J. Hughes Bennett's pardon.

A. B. Shipman, M.D., of Syracuse, N. Y., died at Paris, France, recently. Obituary notice next number.

BOOKS AND PAMPHLETS RECEIVED.

FLINT'S PRACTICE OF MEDICINE. Third Edition. H. C. Lea.

MARSHALL'S PHYSIOLOGY. Edited by Francis G. Smith, M.D. H. C. Lea.

MURCHISON ON THE LIVER. William Wood & Co.

RETRUCTIS MYCTALOPICA. By Prof. Dr. Arlt, of Vienna. Lindsay & Blakiston.

CULLEVIER'S ATLAS. Edited by F. G. Bumstead, M.D. Part V., concluding the work.

WALTER WALKER, M.D.— OBITUARY.

[From the Philadelphia Medical and Surgical Reporter.]

Died, September 10, 1868, in the city of Chicago, of gastro-enteritis, WALTER WALKER, M.D., of Rochester, New York, aged 31 years and 10 months.

The deceased was a graduate of Jefferson Medical College, and a most accomplished gentleman.

His mind was eminently practical, and for years he labored perseveringly and successfully to elevate the standard of ophthalmic and aural surgery to the highest point, in the Northwest.

Several surgical instruments invented by him have grown into common use, and his active mind was constantly engaged in contemplating improvements. In fact, he never seemed so well satisfied with himself as when earnestly laboring to benefit that branch of surgery to which he was devoting his life.

Kind and courteous to all, he was really and truly a Christian gentleman: earnest and persevering in the pursuit of medical knowledge, he was a sincere and blessed help to the afflicted.

He leaves a wife and three children. May God help them to believe that the terrible darkness that follows the death of such a husband and father, is indeed lessened by the vivid halo of an untarnished name—the truest and noblest heritage that a man can leave to his wife and little ones.

And when they come to stand by his (now distant) grave, may God in his goodness, soothe their bitter agony with the tender consolation, that this is the grave of a father and husband, who died young in years, but old in all that makes life worth living for; because he was true to himself, true to his family, true to his friends, and true to his God.

CHICAGO, *Sept.*, 1868. J. D. M. C.

LOOT.

Action of Mercury.

At the recent meeting of the British Medical Association in Oxford, Prof. Hughes Bennett read an abstract of the results which had been arrived at by the Edinburgh Committee. The Committee, after a laborious investigation on the action of mercurials on dogs, arrived at the conclusion,

that whether administered in large or small doses, the preparations of mercury exert no cholagogue action upon that animal — in fact, that they always diminish the flow of bile. How far this report can serve to throw light upon the action of mercurials on man, is, however, a matter upon which more than one opinion can be held. In the course of their investigations, the Committee have found that mercurials, when administered in large doses to dogs, purge them; and, when in smaller and frequently repeated doses, induce the same group of phenomena which are observed in men under the same circumstances, viz.: fetor of the breath, salivation, and ulcerations of the gums. Having accurately ascertained these facts, the Committee appear to consider that the fact that mercurials fail to increase the flow of bile in the dog, affords an almost positive proof that these drugs do not exert a cholagogue action in the case of man. The experiments supported also the modern view that the diversion of the bile, through a fistulous opening out of the body, does not materially interfere with the intestinal functions, but leads to exhaustion of the body altogether. Dr. B. W. Richardson accepted the report as a model of scientific work, but urged still that mercury did exert a beneficial effect, and that experience confirmed its value. Was it possible, he asked, that mercury acted on the pancreatic gland as it did on the salivary glands, and that it caused an increased pancreatic secretion? Dr. Bennett, in reply, said it was quite possible the pancreatic function was modified under the action of mercury, for, as one of the tables indicated, the pancreas in five cases was reported as very vascular.—*Medical News.*

Drinking-Water in Italy a Cause of Stone.

The *Lancet* (Aug. 15, 1868) cautions tourists against the drinking-water in Italy. "Florence, and indeed all Tuscany, is very ill-supplied with this necessary of life — the water being supersaturated with inorganic, and even effete organic matter. In Florence itself, the impurities in the water-supply are chiefly alkaline, and these combined with the acid red wines universally drank by the population have caused stone and gravel to be widely prevalent. We have it on the authority of a highly intelligent Florentine, of great medical accomplishments, that 80 per cent. of the population are more or less afflicted with these diseases; and English residents, after but after a few weeks' experience of Florence and its water, have found themselves suffering severely in the kidneys and bladder."—*Med. News and Library.*

THE

CHICAGO MEDICAL JOURNAL.

Vol. XXV.—DECEMBER 1, 1868.—*No.* 23.

THE VIRULENCE AND SPECIFICITY OF TUBERCULOSIS.

Read before the Academy of Sciences (Paris) by DR. J. A. VILLEMIN, *Professor of the School of Val de Grâce.*

TRANSLATED EXPRESSLY FOR THIS JOURNAL, BY WALTER HAY, M.D., ASSOCIATE EDITOR.

(*Continued from page* 729.)

THUS, then, far from denying any significance to experimental facts long since established, and refusing to perceive analogies the most striking, it must be conceded to us that our inoculations of tubercle have been made under conditions entirely similar to those which have accompanied most experiments of similar character; and, even, in comparison to those of glanders, the corresponding circumstances are multiplied to the degree of constituting an association of phenomena almost identical. Here are undeniable facts—such that no contradiction, however urgent it may be, can refute. It is next asked, where is the serum, regarded as necessary to the constitution of a virus, which should be in the granulations of glanders, the tumor of farcy, the froth of the solipeds, and which is not found in tubercle, nor in the expectoration of phthisical subjects. Moreover, what is known

of the physical condition of contagium? Is it solid, liquid, or gaseous? Do not the brilliant and judicious experiments of M. Chauveau demonstrate to us, on the contrary, that certain virulent fluids have no activity unless they contain solid corpuscles?

In spite of all the efforts attempted to deny to tubercle the properties of virulent substances, no one has, however, been able to refuse recognition to the remarkable power, which its inoculation exercises, of involving the formation, throughout the economy of tubercular productions in great number, and disseminated through the most distant organs. Now, what is comparable to this phenomenon, unless it be the inoculation of virus? However, an analogy as evident has been disputed, and we are reproached with having created at once two difficulties: "the first of which is to establish the existence of the virulent principle; the second to explain how it engenders tuberculous matter." We believe that there are no other proofs of the virulence of a pathological product than its inoculability; and, as to explaining how tuberculous virus engenders tubercle, the difficulty is neither more nor less great than to say how the virus of glanders engenders the tubercle of glanders, or syphilitic virus, syphilitic gummata. We have already stated elsewhere, that the relations between any phenomenon whatsoever and its cause establish, but do not explain themselves.

It is by virtue of a *catalytic* action, analogous to that of ferments, say some, that inoculated tubercle infects the economy with tubercle. Well, has not virus been compared to ferment, and does not the name *Zymotic*, given to virulent maladies, confirm this analogy?

Next, it is asserted that inoculated tuberculous matter acts neither in the manner of a virus, nor by catalysis; it is by a process analogous to that of fecundation. Doubtless it might be asked if, at the termination of the process of fecundation, the fecundating principle reproduces and multiplies itself—if sperm or pollen are recovered from the subject fecundated; but it does not imply the identity of all the terms. Morever,

if there is in this case a sort of fecundation, it exists likewise in the case of all other virulent substances.

By inoculation the detritus of a chancre gives chancre, the variolous pustle studs the skin with variolous pustules, the tubercle of glanders disseminates glander tubercles throughout the organs, just as the phthisical tubercle infects the system with phthisical tubercles.

This hypothesis of fecundation is but one mode of apprehending and explaining the action of virus. It is no less ingenious than all the rest which have been proposed hitherto, and, as we shall hereafter see, tuberculosis is not the only disease to which it has been applied. But in the present state of science, I do not perceive any advantage in substituting for the word inoculation, that of fecundation, applied to this fact of the transmission of a disease from one individual to another by means of a particle of morbid matter. If, instead of seeking our comparisons in unexplained chemical processes and in very remote physiological acts, we form them in the ranks of similar facts — if we observe, for example, what occurs in inoculations of glanders, a disease so similar to tuberculosis, what do we see? We determine that all the particulars observed in the inoculation of tubercles are recognizable in the inoculations of glanders.

These are, by their physical characters, the same inoculated matters, the same alterations of the ganglia and of the lymphatic vessels, the same anatomical processes generalized in the viscera, with preference for the respiratory organs. If, when there is introduced into a wound some of the liquid of the froth, or a little of the caseous matter of a tubercle of glanders, or the detritus of a farcy-button, there is produced at the end of a few days, at the point of inoculation, a little tumor which frequently ulcerates; then from this tumefaction there arises a cord, which extends to the hypertrophied hard and painful ganglia.* Usually, if the inoculation has been performed on one side only, the corresponding ganglia are alone diseased.

*Bouley, *Bulletin de l'Academie de Medicine*, 1838-39, p. 793.

These ganglia incised appear full of glander tubercle, and the lymphatic vessels reach their parietes infiltrated with the same product. There is a series of lesions which is reproduced, in a manner exactly parallel, in inoculations of phthisis. Coincidently with these local alterations there are established in the lungs, the respiratory mucous membrane, the liver, the testicles, the intestines, etc., nodules of variable size and number.* Are there in pathology two processes which have between themselves more of striking analogies than these results of the inoculation of glanders and of tubercle?

In syphilis, is there not also something comparable? The ganglionic plexus manifests to us the part performed by the lymphatic system in immediate proximity to the virulent matter.

Thus the objections which have been urged, in regard to the inoculated substance, to the local accidents of inoculation, to the mode of generalization, to the anatomical lesion, etc., apply as well to glanders as to tuberculosis; and, curious coincidence, these same objections were, in fact, made at the time when the inoculability, the virulence and the specificity of glanders was discussed, just as now. When we established in a work, published recently, a parallel between tuberculosis and farcy-glanders, and when we exhibited these numerous analogies which exist between these two affections, we certainly did not doubt that these analogies would be completed and continued by the similarity of the arguments invoked against the virulence of both of these diseases.†

But before proceeding farther, we must be permitted to correct an error which has insinuated itself into some minds. We are credited with the opinion that glanders and tubercle are identical. We have never thought so. The chapter of our book, in which we have established the approximations of these two affections, has for its title: *Glanders is the disease approximating nearest to Tuberculosis.* We have here devel-

* Saint-Cyr., *loc. cit.*, p.65.

† Villemin, *Etudes sur la tuberculose.* Paris, 1868, p. 431.

oped the affinities which exist between these two morbid entities, as might be done, I think, between scarlatina and rubeola, whilst maintaining at the same time the complete and essential separation between the two elements of the comparison. It must not be imagined that the inoculation and the virulence of farcy-glanders was admitted without opposition. The experiment created as great an excitement as did that of tuberculosis. It was vigorously contested in the consequences and even denied radically. Veterinary physicians were for a long time divided into two opposing factions: the contagionists and the non-contagionists. When Gohier, in 1813, had announced the results of his experiments of inoculation, the non-contagionists showed themselves fertile in expedients. At first they denied the fact, and opposed their own negative results to the positive results of their adversaries. They even denied the possibiltty of the fact. "We ask next, said Dupuy, how *solid matter*, such as that which constitutes the tubercle (of glanders) could become contagious."* It has been more than fifty years since this argument was adduced against glanders, and now we behold it resuscitated against phthisis. It was especially against the chronic form of glanders which approximates most closely to phthisis, that attacks were directed. And what reasons were made available against its contagiousness and its virulence? The same, *identically the same*, as those which have been adduced against the virulence of tuberculosis. Hear Delafond:† "Among the numerous diseases, of chronic type, of our domestic animals, do we discover a single one which is evidently contagious? We know not one. Now, why should glanders be made an exception? We ask, is it possible to find, amongst all the characteristics of this disease, a single one which may be compared with those, so very numerous, which mark diseases positively contagious? No.

All contagious diseases are of acute, or subacute type; the

* Dupuy, *loc. cit.*, p. 455.

† Delafond. *Traite sur la police sanitaire des animaux domestiques.* Paris, 1839, p. 603.

symptoms which designate them are constant, unequivocal, their progress is rapid, their duration brief, their termination, although often variable, is generally unfavorable; all have a known palpable *virus*, transmitting the disease by inoculation. Now it is exactly the opposite characteristics which appertain to glanders."

By the partizans of these theories, glanders, like the phthisis of our adversaries, is attributable to no other causes than diminished action, resulting "from long sustained and very exhausting fatigue....from alimentation maintained for a long time with a diet invariable or innutritious....from residence in cold, damp, badly ventilated and badly lighted localities...."from arrest of perspiration"....from long continued suffering from the presence of chronic diseases, whether internal or external, from resorptions of morbid matters of whatsoever kind, which occur during the course of many diseases.*

Contagion from the horse to man seems not to be sufficiently convincing. Who does not remember the brilliant contest of 1836? And two years later, Delafond refuting Rayer, exclaims again: "No, the cause of the disease called farcy *is not specific*. We recognize in it only the result of an infection, originating in animal matter, fixed or volatile, altered by the presence of air, which, introduced into the economy by absorption, determine morbid effects so much the more intense as the subjects are more debilitated and already predisposed to putrid infection.*

But when crushed by the evidence, the noncontagionists could no longer resist the power of facts, they change their batteries. "Of what significance," said they, "is the inoculation of the product of glanders, and what becomes of its virulence and specificity, since other substances communicate glanders as well as this — since this disease can even be provoked by simple wounds?".

Dupuy, separating chronic from acute glanders, which he

*Delaford, *loc. cit.*, p. 595.

*Id., *loc. cit.*, p. 684.

calls *gangrenous coryza*, induces this latter upon healthy horses by inserting under their skins a *fragment of spleen* taken from a horse dead in consequence of section of the pneumogastric nerve;* animal substances undergoing putrefaction, such as blood, portions of muscles, etc., will produce the same effect, according to him.†

He induced glanders also in horses by inoculating them with the puriform matter which flowed from the nostrils of a horse not affected with glanders.‡

Renault subjected to the examination of the Academy of Medicine pathological preparations attesting the production of glanders by injections of pus, not even suspected,‖ and in order to demonstrate the reality of this glanders, he inoculated it successfully into healthy horses.§ He published detailed observations of farcy-glanders, originating as a sequel to a simple *sore throat*, from a *contusion* of the upper eyelid, from a *fistule* of the spermatic cord, consecutive to castration.*a

Finally, Dupuy demonstrated that *setons* passed through the shoulders of horses had induced in them glanders.†b

In Germany, Erdt developed glanders in four horses by inoculating them with the pathological products of scrofula (1884). Are not all these experiments, all these assertions, all these arguments, directed against the virulence and the specificity of glanders with as much authority and force as those which are opposed to tuberculosis. If then it is desired to maintain them in order to prevent the admission of tuberculosis into the list of virulent maladies, farcy-glanders must also necessarily be eradicated therefrom, being retained therein with no more propriety than the latter.

* Dupuy. Bull. de l'Academie de Medicine, 1836, p. 481.

† Dupuy, *de l'affections tuberculeuse.* Paris, 1817, p. 244.

‡ Ibid, p. 454.

‖ Renault. *Bulletin de l'Acadèmie de Médicine*, 1839, p. 69. 1840, p. 402.

§ Renault. *Recueil de Médicine Vétérinaire*, 1840, p. 257.

*a Renault. *Recueil* de Medicine Veterinaire, 1835. p. 393.

†b Dupuy. Bulletin de l'Academie de Medicine, 1836. p. 481.

The objections urged (I will not say to the inoculation of tubercle, for that is undeniable, but to its virulence and specificity,) have been made not only to glanders, its congener, but to syphilis, its relation one degree farther removed. Syphilitic virus has had, like that of glanders and that of tuberculosis, its violent enemies, and the arms of which they made use are no other than those which have been gathered up again by the adversaries of the specificity of tuberculosis. And, moreover, the first argument was to deny its inoculability and to oppose, to positive experimental results, those which were negative and contradictory. This is what was done by Bru, and in order to account for venereal accidents, he admitted, *un mode venerien*, explained physically by electricity.* Caron, following the footsteps of Bru, assimilated the transmission of syphilitic accidents to the *impregnation* of females; he explaned this by the *fecundation* and not by the absorption and the multiplication of a virus. "It is not," said he, "a virus which is inoculated in the venereal contagion, but it is an occult vice which is developed in us, it is nature, it is life, which establishes the syphilitic constitution." The venereal infection has at first only a local action, which *extends itself successively to certain parts.*† This theory of fecundation is already old, as we perceive, and with it we recognize at the same time the mode of progression, step by step, by which it is attempted to explain the development of tubercles in the organs. Jourdain likewise denied the existence of syphilitic virus, by denying the specificity of the venereal disease, and all significance to its inoculation. He affirmed that "similar and even more grave results are seen to result from a simple puncture.‡ The constitutional manifestations of syphilis depended, according to Jourdain, upon a great number of different causes. Richon-des-Brus,

*Bru. *Nouvelle methode de traiter les maladies veneriennes par les gateaux mercuriels.* Paris, 1789.

†Caron. *Nouvelle doctrine des maladies veneriennes.* Paris, 1811.

‡Jourdain. *Traite complet des maladies veneriennes.* Paris, 1816.

in his book, "The non existence of the venereal virus,"* and Desruelles continued the war against the virulence and specificity of syphilis.

The first admitted the spontaneity of this malady, and the second sought its causes in the seasons, the temperature, hygrometry, etc.

Thus, then, there was a time when glanders and syphilis, like the tuberculosis of our opponents, originated from every thing — was inoculated by every thing.

What is to be learned from these teachings of history? It is that the facts which have suggested such analogous arguments and contradictions must necessarily have among themselves very great analogies of character. In fact, syphilis, glanders and tuberculosis form a nosological group whose species have among themselves incontestable affinities.

If tuberculosis is specific and virulent, it is for that very reason contagious. But it remains to determine the mode and the conditions of its transmissibility. That phthisis may be communicable by inoculation like syphilis, I believe to have been placed experimentally beyond any doubt. It is inoculable from man to certain animals, and from these animals to others of the same species. Is it from man to man? It is absolutely forbidden to apply the experimental test. But every thing indicates the affirmative. To say that it is not so because no one has seen an instance of it, is to refuse to the inoculability of tubercle the right to appear in its day and hour like every other scientific truth. A discovery consists exactly in the summing up of the evidence of a fact which had up to that time eluded observation. At the first report of human glanders, for example, it might have been objected that the thing had never been seen, who then had observed the relations of the phlegmasiæ of cardiac serous membranes with articular rheumatism before the beautiful discovery of the *law of coincidences*.

On the other hand the transmissibility of tuberculosis by the act of cohabitation, although regarded as very probable by

* Richon-des-Brus. *De la non existence du virus venerien*. Paris, 1826.

a certain number of distinguished practitioners, is not, however, so evident that it may not be contested. There is in this matter an obscurity which imposes the greatest reserve, and consequently the clinical evidence, especially in a large hospital, is not sufficient to justify the absolute denial of this mode of transmission of phthisis. Large cities, vast establishments where so many maladies are accumulated, and which are impressed with so many morbific matters, are far from being favorable for the especially difficult study of contagion. In these localities, for instance, the transmission of typhoid fever is almost always concealed, whilst it becomes apparent in small villages, in the bosom of families nearly isolated, to the observer placed in circumstances less complex, more clear, more exact, and on that account more conclusive. And then, moreover, what is the communicable disease whose transmissibility has not been determined? May we not then believe the clinical observer authorized to affirm every where and always the spontaneity of tuberculosis and to deny absolutely the possibility of its transmission by contamination? But would it be right, on this account, that he should infer nothing against the inoculability of tuberculosis? It would, therefore, be much more in accordance with modesty that the solution of questions relative to the propagation of tuberculosis in the human species should be reserved for the future, which will decide, we may be sure, not upon argument and theories, but upon positive and perfectly demonstrated facts. For myself, aided by experiment, I have sought to determine the circumstances which appeared to me to play a preponderating part in the transmission of phthisis.

The curious and important results which I have already obtained, seem to me to be destined to throw some light upon this point. If the Academy will grant me the permission, I shall have the honor to communicate them to it hereafter.

I conclude, gentlemen, by thanking the Academy for the courtesy with which it has condescended to hear the explanations which I have just submitted to it; I am aware, however, that I owe it entirely to the importance of the subject which I have treated.

DYSTOCIA, ORIGINATING IN A RARE POSITION OF THE FŒTUS.

BY H. WEBSTER JONES, ACCOUCHEUR TO COOK COUNTY HOSPITAL.

THE patient, Bridget D——, was a primipara, æt. 26, of robust constitution, and having arrived at term, was seized with active pains, at 7 P. M., October 18th, 1868.

The abdomen was unusually large; the os uteri high in the pelvis, and undilated, and no part of the fœtus was tangible per vaginam.

Through the abdominal walls the head could be felt, resting upon the right side of the pelvic brim. External manipulation, between pains, succeeded in effecting only its temporary dislodgement.

During the night, pains were frequent and severe, attended by vomiting and restless apprehension.

At 4 A. M., October 19th, the os uteri was found to be fully dilated, with the membranes protruding; the head was discoverable per vaginam, located as before mentioned, and resisting all effort to engage it in the superior strait.

Pulse 110; tongue dry and parched.

At 5 A. M. the patient was anæsthetized, the membranes ruptured (there was an excessive discharge of liquor amnii), and the hand fully introduced within the uterine mouth.

The occiput was found to occupy the right sacro-iliac fossa, the forehead resting upon the pubis, at the right of the symphysis; the head was strongly extended, the back arched upward, and to the extreme left was a foot (apparently the right), with the heel directed inward. Between head and foot was a wide space, in which the hand could be freely moved, occupied solely by a pulsating loop of the umbilical cord.

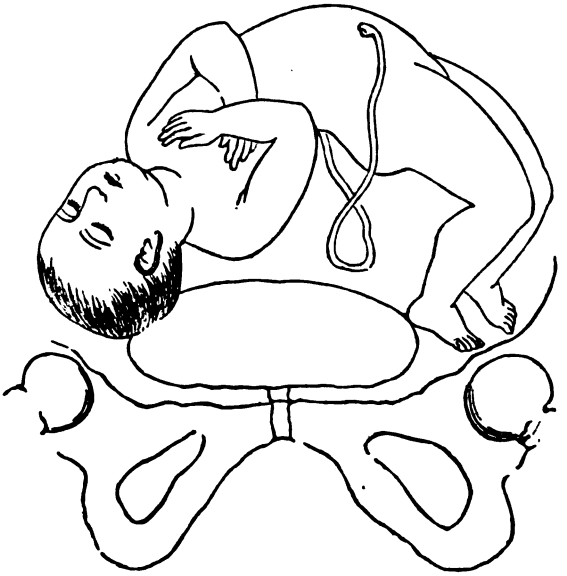
Efforts at flexing and votating the head proved futile; neither

was it possible to draw down the foot to any considerable extent. Dr. Jones was sent for at 8 A. M.

Thus far our able house-physician, Dr. N. Senn, narrates the case.

Upon my arrival, at noon, the patient was found to be in an irritable condition, her pains severe; pulse one hundred and twenty; tongue dry; otherwise apparently in *statu quo*.

Chloroform being now administered by Dr. Senn, I proceeded to verify the diagnosis already made, and, with additional assistance from Drs. D. S. Root and Miller, to deliver the patient by such method as might be most promising.

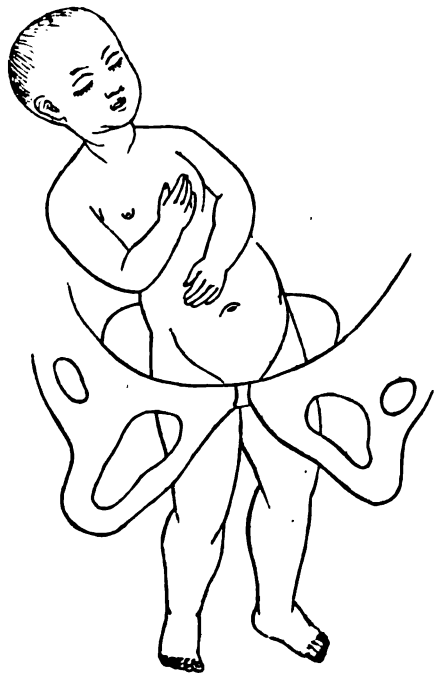


The accompanying diagram illustrates very nearly the position then occupied by the fœtus. Agreeing in essentials with the statements before made, the degree of extension of the head present, taken coincidentally, with the posterior relations of the vertex secured, to favor podalic version rather than a forceps delivery.

Both feet were now firmly grasped, and an effort made, aided by external manipulation, to rotate the body on its transverse

axis, in elevating the head and depressing the pelvic extremity, as well as, longitudinally, to turn the back of the child toward the front of the mother. This complex attempt was successful only in the substitution of an anterior for a posterior rotating of the trunk.

The descent of the fœtus upon the latter procedure, was as represented in figure second.



Rotation to the right being still continued, the left shoulder was first to appear at the vulva, the arms having already been brought down.

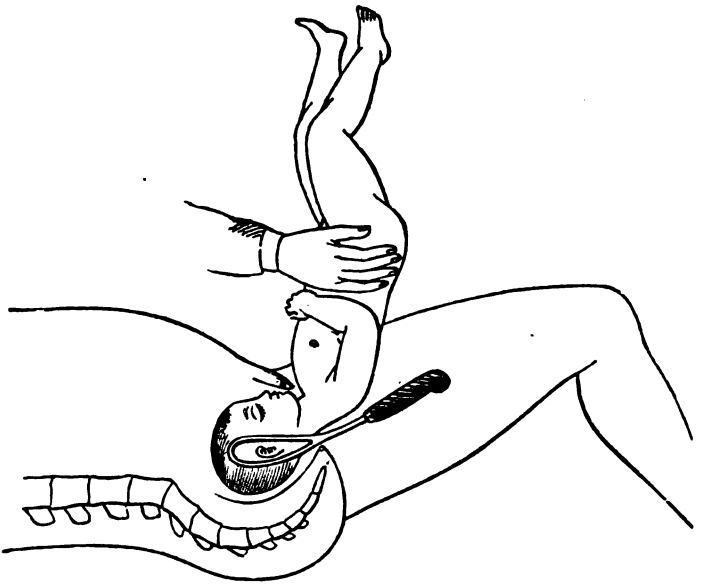
A difficulty here occurred, in the failure of the head to follow the line of rotation indicated. It was arrested, as shown in figure third,

the face looking toward the right groin, with so much of flexion, as that the chin was not caught upon the pelvic brim, yet apparently immovable as regards traction by the trunk, by the fingers within the mouth, or by external pressure above the pubis.

The fœtal pulse now flagging, immediate resort to the forceps was determined upon.

It was impossible to adjust the female (right) blade upon the anterior aspect of the face, so that rotation into the sacral hollow could be effected.

Delivery of the head was partly accomplished, as portrayed in figure fourth, the mental extremity of its long diameter finding easy exit beneath the pubic arch.



Life was extinct, the operation having occupied three quarters of an hour, and the cord subjected, meantime, to a pressure almost constantly hazardous.

The mother recovered without untoward symptoms.

The position of the child, as described in the early stage of labor, could have been possible only in the presence of a large excess of amniotic fluid.

The sudden and severe onset of uterine contractions, probably conduced to its maintenance, their immediate effect upon the fœtal arch being to separate feet and head more widely, and deter either extremity from the superior strait.

Such a condition is certainly very rare, and is believed to be hitherto unrecorded.

OPIUM AND STRAMONIUM.

BY JAMES T. NEWMAN, M.D., CHICAGO.

It has long been a subject of debate in my mind whether or not there existed an antagonism between opium and stramonium; hence, I resolved, on the first opportunity that presented itself, to test them. But, having no chance to experiment, it looked to me as though the problem would never be solved, as far as I was concerned. Yet an unlooked for accident has more than rewarded my patience, and I can say with much pleasure and confidence that one is antagonistic to the other. I feel perfectly satisfied that in opium we have an antidote for belladonna and stramonium. Should cases of poisoning occur from either of those drugs, and the patient seen sufficiently early, there is no need of resorting to them. But, on the other hand, if the poison has been taken up by absorption, we then need an agent to hunt it up and undo what has been done.

To the case in question. Was called on the 1st of October, about half past one o'clock in the morning, to see a mother and her two daughters. They had had paroxysms of ague, and the mother resolved on being her own doctor. She conceived the idea that fennel seed was the medicine she wanted. She sent one of her little girls to a German drug store for the aforesaid fennel seed. Having obtained them, she at once proceeded to make a tea; the strength of it I can not tell. When I was called in, I found the mother and her two children were in a frightful condition. The mother and oldest girl were raving like maniacs, while the youngest girl was rapidly sinking into a state of coma. I soon perceived that they all were laboring under the influence of some powerful narcotic, but what one of them I was unable to determine. I called the attendant, and was informed that she had made a tea of fennel seed, and had drank freely of it

herself, and had given the children one or two cups full. I immediately inspected the vessel containing the tea, and to my great horror I found that my patient had been poisoned with stramonium. Two of them were maniacs, and the other almost expiring. What must be done? To think of giving emetics would be out of the question. Hence, I resolved that *Opium* should be their saviour. I sat down and wrote two prescriptions, one for two ounces of *Tincture opii*, and the other for *Morphia sulphatis*, gr. viii., in two ounces *Aqua*. Ordered the mother and girl to have one one teaspoonfull every half hour, and the younger child was treated with the solution mentioned above. The hypodermic syringe was called into use every half hour. I injected beneath the skin two drachms of the liquid. The child recovered rapidly, but the mother and the oldest girl seemed to defy treatment. What must I do? I could not give them up to die! About this time it was daylight. I thought that I would change the *Tincture opii* for *Morphia*. Accordingly I wrote for twelve grains of *Morphia sulphatis*, to be divided into four parts, one every two hours, and at the same time for

℞ *Ammonia, Arom. Spts.*, ℥ iij.
Syr. Zingiberis, ʒ ij.
Misce. fiat mist.
Sig.—Two tablespoonfulls in a wine glass of water every half hour.

The ammonia seemed to give them more strength, but was far from quieting their ravings, and not until the second dose of *Morphia* was given, could I perceive any contraction of the pupils. At twelve o'clock, October 20th, the last dose of *Morphia* was given. Precisely at half past one the young lady fell off into a sleep; the mother soon followed. I ordered every thing to be kept quiet. I called again at five in the evening, but finding they were still asleep; did not disturb them. Called at nine; found them both sitting up in bed, but very weak. The youngest girl was drinking some tea, but not made from the seed of stramonium. The mother

and the other girl both refused to eat. Soon went to sleep again; rested quietly all night, and in a few days they were attending to their labors as usual.

In presenting this to your readers, I do not claim any thing new, but there is one thing that I feel assured of: I hav determined the truth of it myself.

CASE OF POISONING BY FLUID EXTRACT OF GELSEMINUM.

BY W. F. HANI, OF MIDDLEBURY, ELKHART CO., INDIANA.

PROF. ALLEN — *Kind Sir:*

As one of the Alumni of Rush Medical College, I would ask to transmit to the profession, through the columns of your JOURNAL, the report of a case of poisoning and death by the article in *Materia Medica* known as Gelseminum Sempervirens, or yellow jessamine.

J. F. came to my office on the evening of March 24th, 1868, and stated to me that his son F., aged eighteen months, had taken part of the contents of a vial of medicine which was given him to play with by his mother, and which had been prescribed for him about a month previously while laboring under an attack of acute pneumonia. After taking it he, in fifteen or twenty minutes, became so stupid that he could not be aroused by his mother. I then asked him how long since he had taken the dose, when he replied, about one-half hour since; upon which he handed me the vial that contained the fatal draught. Upon examination I found it contained the *Fluid extract of gelseminum.* I then told him that F., as I thought, had taken a poisonous dose of the article. He then wanted to know where Dr. J. Yagerlenner was, who had prescribed the medicine. I told him the doctor had just gone to his home, and he had better see the doctor immediately and have him see the boy. When the doctor arrived, he found the child retching and vomit-

ing, and difficult to arouse. Dr. J. immediately gave him brandy, but only succeeded in getting him to swallow about a teaspoonful, when F. fell into profound stupor which lasted until life was extinct. About two hours subsequent to Dr. J.'s arrival I was sent for, and upon arriving and hearing the doctor's statement, I examined the case and found F. apparently lifeless, face and lips blue and livid, no pulse at the wrist nor at the carotids, pupils large and dilated, and upon examining the heart found the palpitation slow and very feeble, but continued to beat twenty minutes when life ceased. The amount of fluid extract taken by F., was, as stated by one of the parents, about thirty drops.

Now, as I am unable to find any authenticated cases of poisoning and death from the effects of yellow jessamine, I would be pleased to hear from some professional brother, through the columns of your JOURNAL, of any of the foregoing cases, and upon the best means and remedies adapted to counteract the poisonous effects of the yellow jessamine. My own opinion is inclined to be that emetics administered immediately with the stomach pump, and *Opium* given as an antidote, or some of the preparations of *Strychnia*. My reasons for resorting to *Opium* and *Strychnia* are based upon the fact that they produce contraction of the pupil — the direct opposite of the condition of the pupil in this case.

LACERATION OF THE PERINEUM AND POST PARTUM HÆMORRHAGE.

Two Cases reported to the Chicago Medical Society,

BY HIRAM WANZER, M.D., CHICAGO, ILL.

CASE No. 1.— I was called to Mrs. B., æt. 28, August 13th last. She had been in labor with her first child twenty hours, under the care of a midwife. Upon digital examination, I found the head presenting at the superior strait, the os uteri

soft and moderately dilated, the soft parts were quite unrelaxed, and there was also rigidity of the perineum. The pains up to my arrival had been energetic, but the uterine contractions failed, even after complete dilation of the os, to increase the slightest advancement of the head. After waiting some four hours longer, I applied the forceps. The difficulties were somewhat increased by the mal-position of the head, the forehead looking to the left sacro-iliac junction, and the occiput to the right; consequently the blades were applied to the forehead and occiput of the child. It required a degree of force to dislodge the head, and bring it down into the excavation. During traction she complained severely of crampings. Had I withdrawn the instruments after the head's descent, and left her to the unassisted powers of nature, in order that the perineum and soft parts might relax physiologically, delivery might possibly have been accomplished without further interference, but I was fearful that further delay would not only increase the exhaustion of the mother, but compromise the life of the child. The rapid delivery of a preternaturally large head, apparently out of proportion to the parts of the mother, caused not only the complete division of the perineum, but also the laceration of both external and internal sphincter ani muscles, together with an involvement of the recto-vaginal septum, of one and a half inches, opening the vagina and rectum into one passage. A full anodyne being given, I immediately coapted the edges of the lacerated perineum by two deep ligatures. One of them came away on the 2nd, the other on the 5th day. Granulations at this time were quite luxuriant at the bottom of the wound. She was placed upon the side, and vaginal enemas of tepid waters were daily used, and at no time did the water escape by the rectum. The bowels were kept constipated by the *Tinct. Opii* for the first ten days, when an oleaginous enema was given, inducing a free evacuation without suffering. They were used occasionally for two weeks longer, while strict recumbency was enjoined. She was at this time able to resume her household duties. Her diet consisted of

fluid nourishment; such as could be absorbed into the blood with as little fæcal residue as possible. The six weeks following parturition, she complained of want of power or contractility in the sphincters, to restrain the fæces, but since that time she states that she can hold them indefinitely; showing the ultimate possibility of their tonicity being re-established. Both the mother and child have done well. I would ask the experience of the society in laceration of the perineum, caused by the maladroit use of instruments, or otherwise, and their method of procedure.

Case No. 2.—I was called Sunday, August 30th last, to Mrs. C., æt. 31, at 7½ A.M. She had been in labor with her seventh child since 2 o'clock that morning. She stated that the pains had been quite energetic up to the time of my arrival. Upon examination, the os uteri was fully dilated, the vertex presenting, the soft parts well relaxed, and in less than three-quarters of an hour the child was born. I waited a few moments, and proceeded to the delivery of the placenta. Upon gentle traction of the cord there was some hæmorrhage, not sufficient to cause alarm; there had been none during labor. After the delivery of the after-birth, gentle frictions over the uterus were applied, until sufficient contractility of the organ was insured. The adjustment of a moderately tight bandage was not neglected. Upon leaving the patient, I requested them to summon me immediately should any thing occur unfavorably; otherwise I would call the next day. In about an hour a most alarming and exhausting hæmorrhage supervened. The patient, in a few hours' time, had been reduced from full health and plethora, to the sunken eye, the palor, the collapsed and cold surface, and the almost pulseless condition we find in Asiatic cholera. The blood clots from the mouth of the uterus and vagina were immediately removed; the pillows taken from under the head; the foot of the bed was elevated to an angle of about thirty degrees. Pressure and friction were applied over the uterus until the organ was felt to contract sufficiently; also cold applications to the vulva, warmth to the feet, and re-adjust-

ment of the bandage. Two drachms of *Tinct. Ergot* was given every hour, with perseverence in *position*, and perfect quietude and recumbency. The hæmorrhage, in a short time, was completely arrested, and she entered upon convalescence. She states she had suffered from post-partum hæmorrhage at her three last accouchments, and in one instance had hæmorrhage before labor, but never to an alarming extent. As there was no complication apparent in the case, I can not ascribe cause for the accident. Nothing abnormal had transpired during gestation or the delivery. I regard *position* our sheet-anchor in these alarming cases; but for it the mother might have perished. I view all other agents simply valuable auxiliaries in post-partum and in other exhausting hæmorrhages.

No. 172 West Twelfth Street.

BOOK NOTICES.

Outlines of Physiology, Human and Comparative. By John Marshall, F.R.S., Professor of Surgery in the University College Hospital; with additions by Francis G. Smith, M.D., Professor of Institutes of Medicine in the University of Pennsylvania. Henry C. Lea, Philadelphia. 1868.

Time and space alike forbid the indulgence of the desire to give an extended notice of this excellent treatise on physiology. Still, however, we can not refrain from saying a few words in commendation of a work which we believe will become popular, among students at least, so soon as they shall have become familiar with some of its merits.

Unlike most book-makers, the author of this volume seems to have been troubled by no lack of subject-matter wherewith to make up a saleable article for the book market. His difficulties have been of quite another character, and the magnitude of his subject, and not less the abundant resources

at his command, have tempted him to exceed by far the limits of an unpretending treatise as originally designed, and give to the profession a work which is destined to take high rank amongst professional classics. The book is not the less attractive in that it presents considerable variation from the stereotyped plan of most of the physiological treatises which are at present accessible to the student and to the general reader, and some of these variations in the mode of arrangement and presentation of the subjects, while they may meet the criticism of the hypercritical, will, at the same time, secure the commendation of the tyro who will be grateful to the author who has given him so extensive a view of the science, upon his knowledge of which must mainly rest his hopes of attaining practical accuracy in his professional career. While, as has been already stated, the author has drawn largely upon the stores of physiological science accumulated by preceding and cotemporary observers, he has been by no means only a compiler, but gives evidence of laborious, patient, and intelligent investigation, and careful classification and generalization.

The work is abundantly illustrated with wood cuts, taken from the most reliable authorities, many of them being designed from the author's own observations, and are truthful and well executed. We are glad to perceive that the author arrays himself against the theory of spontaneous generation, which has recently, in France, received a new impetus from the fallacious experiments and sophistical arguments of Pouchet and others: the axiom "*omne vivum ex ovo*," is as clearly unassailable to-day as when it was proclaimed by the great father of medicine two thousand years ago. Of reproduction the author has assumed the division of Carpenter and the older physiologists, into two kinds, sexual and non-sexual. This decision is certainly based upon incomplete analysis and partial comparison of the phases of the reproductive process in different organisms, and must eventually be abandoned when comparisons have been made between these processes in their totalities. Germination in the plant,

or fissiparous or gemmiparous reproduction in the lower animals, has apparently little in common with the fertilization of the ovum in the human organism, and if these two phenomena should be regarded as the corresponding phases in the reproductive processes of the classes of organisms referred to, the processes might with propriety, indeed ought to be placed in different categories. But when the phenomena of gemmation or effission respectively are compared with those accompanying the phase of placental separation in the reproductive process of the higher mammalia, the identity of phenomena is so striking as to necessitate the conclusion that these are corresponding phases, and that other correspondencies will be recognized when a more accurate parallelism shall be maintained in the comparison of reproductive processes throughout the entire organic world.

We would here take exception to the total silence maintained by our author, in common with nearly every other physiologist regarding the influence of moral and physical agencies in the modification of physical function and structure. Man is considered exclusively as a material organism, subject to the operations of material agencies, either external or internal, solely, or at the furthest, to those of a purely emotional character. In this there is an apparent incompleteness in the analysis of functional correlations; for, while the most careful and laborious research has been expended in the investigation of, and due consideration given to the relations of the lower portions of the nervous system with the purely vegetative and animal functions of the organism, and to a certain extent those of the emotional centre, the mesocephale with the same have also been considered. The still more important relations of this latter portion of the nervous system, with its dominant organ, the cerebral hemispheres, have been tacitly abandoned by the physician to the metaphysician as some thing truly *μετα τα φυϭικα*, and those of the organ of intellection and volition, with all the rest of the organism over which it is theoretically admitted to dominate, is totally ignored. This disregard of the psychical

relations of the human organism must, by excluding the flood of light which might be thrown thence upon the more subtle and intricate modifications of function and structure, both in health and disease, which now so completely baffle the investigator, must prove an effectual barrier to the progress, not only of physiological science, but of therapeutical efficiency.

We demand for physiology a more extensive scope, a more comprehensive insight into man's nature, inseparably three-fold, and insist that in restricting his investigations to the purely physical and material aspects of the subject, and the abandonment of the moral and intellectual to the theologian and the metaphysician exclusively, the physiologist has relinquished the richest portions of his rightful domain.

Of the typographical and mechanical work it is superfluous to say any thing more in commendation than that it comes from the press of H. C. Lea, of Philadelphia, whose name alone is a sufficient guarantee of excellence in this department. W. H.

RECHERCHES' experimental sur une fonction du foie consistant dans la séperation de la cholestérine du sang et son élimination sous forme de stercorine (Seroline de Boudet) par Austin Flint, fils, Doctor en Médicine, Professeur de physiologie et de microscopie au College de Médicine de Bellevue Hospital à New York, et au College de Long Island, Hospital à Brooklyn; membre de l' academie de Médicine de New York, etc. Paris: Germer Balliere, Libraire Editeur. New York: D. Appleton & Co., 1868.

We are indebted to the courtesy of Messrs. Appleton & Co. for the valuable treatise whose title is prefixed, a familiar friend, not the less welcome that it comes to us clothed in a foreign garb. The appearance of this work in its new guise is a double source of congratulation; first, to its author, that he has received so flattering a recognition, which he so richly merits, in what he himself terms "*le foyer de la science physiologique*," and secondly, to that "focus" itself in that it has acquired an additional ray of scientific light to aid in

maintaining its perennial brightness. It is not inappropriate too, that our young American physiologist should, in this French edition of his work, make to the physiology of France a testimonial of acknowledgment of the source from which he undoubtedly derived his scientific facts, not less than his inspiration to the labor of investigation to which we are indebted for such solid results.

FLINT ON CHOLESTERINE.

The author has commenced his investigation into the subject cholesterine, *ab initio*, by a thorough analysis of the literature of the subject, from its discovery by Poulletier de la Salle, in 1782, to the present day, starting with the justifiable assumption of Robin et Werdeil, that the physiological role which it fills in the economy, is unknown; he is led to the hypothesis of its analogy, both physiological and pathological, with urea; maintaining that the discovery of cholesterine will effect as much toward the elucidation of many obscure maladies which may be hereafter classified under the title cholesteræmia, as the discovery of urea has effected for those now recognized under the title of uræmia.

The author's experiments upon bile, performed upon dogs, furnish an interesting explanation of the discrepancies perceptible between those of Bidder and Schmidt and Schwan, and those of Blondlot, and at the same time establish the possibility of the restoration of continuity, once interrupted, in the excretory ducts of glands, and likewise determine a new function for the bile, viz.: the separation of cholesterine from the blood. In pursuing his investigations further, he traces this excrementitious substance, cholesterine, from its formation by the disintegration of tissue and its transportation in the current of the circulation to its separation from the blood by means of the liver, and also the disturbances produced in the economy by its retention in the blood, in consequence of failure in the excretory activity of the liver, which condition he very appropriately designates cholesteræmia. Regarding the physiological relations of cholesterine and

stercorine, the author has demonstrated the four following propositions:

1st. Cholesterine is an excrementitial matter, produced by the disassimilation of nerve substance, and absorbed by the blood.

2nd. It is separated from the blood, during its passage through the liver, enters into the composition of the bile, to which it gives its excrementitious character.

3rd. It is poured out with the bile into the upper portion of the small intestine, where the digestive process changes it into stercorine, under which form it is enveloped in the fæces.*

Apropos of the pathological relations of these two bodies, our author concludes,

1st. That the proportion of cholesterine in the blood is enormously increased, which shows that an organic change in the liver has prevented its separation from this fluid.

2nd. A corresponding diminution of stercorine in the fæces shows that the cholesterine is not poured into the alimentary canal in its normal quantity.

4th. Stercorine, which constitutes the great excrementitious element in the fæces, is one of the most important excrements resulting from the usage of the economy.

It is impossible, within the narrow limits at our command for the purpose, to do full justice to Dr. Flint's monograph; it must be read, yes, studied, to be appreciated, and should be studied, and carefully studied, by every one pretending to physiological knowledge, or practical excellence.

W. H.

We have received the third number, for October, 1868, of the *Revista Medico Quinorgica y Dentistica.* Periódico de las Ciencias Médicas En Todas Sus Ramos, Y. Eco De La

* The discovery, in February, 1868, by the writer, of cholesterine in the fæces of a patient in whom disintegration of the mucous surface of the duodenum had been already established by concomitant symptoms, furnishes confirmation of the proposition. W. H.

Brensa, Médico Estranjira. Bedactores Y. Boprntarious, Los Sres: Wilson Y. Gonzales. Habana, Cuba.

We are most happy to extend a hearty welcome to this youthful stranger from the Queen of the Antilles, and to accede to the request of its editors "to be placed upon our exchange list." Under any circumstances we should receive this journal with pleasure upon its own merits solely, but our pleasure is enhanced by so substantial evidence of the status and *esprit de corps* of our professional brethren in the West Indias. "*La Revista*" is a quarterly of upwards of one hundred pages per number, containing several original articles of a high order of merit, and also admirable selections from the best American and European journals. Many of the articles are handsomely illustrated, and altogether the journal presents an appearance highly creditable to its editors and its publishers.

We shall take the liberty, from time to time, to translate from its pages such items as may appear likely to interest our own readers, as "a fair exchange is no robbery." W. H.

ALBUMINURIA: Translated from La Revista Medico Quirurgica, Habana.

Professor Semola, of Naples, announces the opinion that the passage of albumen into the urine in the disease called "Bright's," is a necessary consequence of a general deficiency of nutrition, in virtue of which the albumen, becoming incapable of exercising its functions, is eliminated by the kidneys as a substance foreign to the organism. According to this theory, the alteration of these organs occupies only a secondary part in the pathology of the disease; and yet the condition of the kidneys is an important *datum* in the prognosis. Professor Semola protests against the ideas of those who pretend to explain or to solve the question by virtue of mere anatomical deductions. One of the diagnostic signs which distinguish organic from symptomatic albuminuria, rests upon the quantity of urea, which in true Bright's disease, diminishes from the first appearance of the albumen, and at

a later period accumulates in the blood. The same occurs with the sulphates. Of artificial (?) albuminurias, that which originates from suppression of the cutaneous functions, most closely assimilates to Bright's disease. This suppression impedes, on the one hand, the oxidation of substances introduced into the system under the form of peptones, (products of the digestion of albumen), and, on the other hand, occasions congestion of the viscera, especially of the kidneys. Thus, according to this author, Bright's disease is not the result of a primitive anatomical lesion, but the result of that double series of effects which succeeds more or less quickly the suppression of the function of the skin. Consequently, the efforts of the physician ought to be directed to the re-establishment of these functions, by augmenting the oxydation of the peptones and effecting the disappearance of the renal congestion. Amongst the remedies best adapted to this object are to be reckoned ordinary sudorifics, or in obstinate cases, bottles of hot air,* followed always by cool or cold shower baths, the preparations of arsenic, and inhalations of oxygen. The diet ought to be feculent or vegetable, with very little meat.

Results of Surgical Operations in Portugal. — In examining the work of Dr. Antonio Maria Barbosa, published in *la Gaceta Médica de Lisboa*, we find that the results of special operations performed by Portugese and French surgeons in Paris and Lisbon, are less favorable than those obtained by the surgeons of London. In the operations for hernia and lithotomy by Dr. Barbosa, we perceive that the advantage is clearly on the side of the English surgeons. Among the former the mortality was as follows: Hospitals of Paris, 60.45 per cent.; in Lisbon, 58.82 per cent.; in London, 50.75 per cent. Among lithotomy operations, the mortality was 37.3 per cent.; in the hospitals of Paris, 35.7 per cent.; and 21.5 per cent. in London.— *Gazeta Medica de Bahia.*

* The Professor does not state how the "bottles of hot air" must be applied or used.

Prof. Turk. — The heirs of this distinguished physician have donated his library, comprising more than a thousand volumes, amongst which are many works of great merit, to the Royal Society of Physicians of Vienna. The instruments for laryngoscopy were assigned to the Surgical Clinic of Professor Dumrischen, and the duplicates to the department of the hospital which was in the charge of the deceased. — *Allgemeine Wiener Medical Zeitung.*

Professor F. Verdugo died recently in Salamanca, Spain, at the advanced age of 105 years, after having practiced medicine during eighty years. — *Revista Medico Quirurgica, Habana.*

PHILADELPHIA CORRESPONDENCE.

Philadelphia, November 12, 1868.

Editor Chicago Medical Journal: As I mentioned in my last communication to your columns, as probably to take place, the reception to Professors Gross and Pancoast came off at the Foyer of the Academy of Music on Saturday evening, October 25, and it was a magnificent affair. Many of the distinguished medical gentlemen were present from other cities, and it was a brilliant entertainment, well conducted, and eminently well merited.

I shall close my short series of letters on the subject of uterine diseases with this letter, noticing in the first place the *hypertrophied uterus.* It is impossible to find an ulcerated, or indeed even an inflamed uterus, without hypertrophy more or less marked. But there are cases of enlargement without any present ulceration or inflammation even. I have noted sixty-five cases of hypertrophied uteri with no other form of disease existing, and as a natural sequence, more or less prolapse in all. The womb increasing in all its dimensions, necessarily

increases its weight. This augmentation of weight forces the uterus down into the vagina, notwithstanding the vaginal walls may be quite tense, and the patient presents herself for treatment for "falling of the womb." How shall we treat this? By pessaries? By caustics? Better than pessaries, but better than all, by sponge tents. They *may* fail, but in the sixty-five cases before mentioned, in forty-one the sponge tents were all the treatment. Tent after tent was introduced, and in thirty-seven the cure was complete. So far as our observation extends, the larger proportion of prolapsed uteri are due to hypertrophy, and when this is cured the prolapse is cured.

In hypertrophied and in inflamed and abraded uteri, the knife has been recommended by Louis especially, and he advised the cervix in many cases — especially in occluded os uteri — to be incised. In our clinic, and in my own private practice, the mucous membrane lining the cavity of cervix, as well as the mucous covering of the os, has been freely scarified by bistoury, with the most astonishingly rapid improvement. Incisions — several in number — are made in all directions, remembering the great thickness of cervical mucous membrane, and blood allowed to freely exude. Oftentimes an hypertrophy will melt away, and congestion disappear before the patient rises from the bed. I would strongly urge it as a plan worthy of very general use. As I have before remarked, the pathology, as well as treatment, of uterine diseases, are rapidly progressing. It is a specialty demanding the attention and study of the general practitioner of the country, for to him will fall a large amount of uterine diseases, which, if properly managed, will be the best tests and proofs of the value of any suggestion I may have dropped in these letters.

If I have aided one mind upon this subject, through the large circulation of as valuable journal as yours, I shall be well satisfied.

I have an interesting case of a large uterine polypus to present you with in my next. Yours, etc.,

E. R. H.

EDITORIAL.

Publisher's Notice.

It is peculiarly gratifying to the conductors of a publication, with many weights and responsibilities to sustain, that the outside reader can know nothing of, to receive assurances of favor and esteem from his patrons. From the time of its commencement up to the beginning of the present year, THE JOURNAL was conducted by professional men whose one aim was to supply the want for such a periodical which the rapid growth of the profession had created. The attention of these was entirely absorbed in furnishing the most valuable articles and intelligence; so that it naturally happened that the business of the periodical, which is no less important and necessary to its existence than the editorial management, fell into neglect. This will account for the mistakes which required no inconsiderable amount of labor and trouble on the part of the present conductors to correct. Efforts have been made during the present year to secure the payment of the subscriptions on THE JOURNAL, many of which had been accumulating, and which amounted in the aggregate to a large sum. When, therefore, the bills were presented to the delinquent subscribers, some of them, having been long accustomed to receive THE JOURNAL for nothing, grumbled excessively, and request a second or third presentation of their account. The replies of these discontented spirits go to make up the sum of troubles which the editor is obliged to experience; but it was at least satisfactory to learn that the majority of them with the honorable spirit which ever characterizes the worthy members of the profession, did not repudiate so just a debt. It has been gratifying too, not a little, to receive remittances accompanied with an expression of appreciation of THE JOURNAL, and of a determination to render prompt payment in future. The following characteristic letter was received while the last number was in press:

November 10, 1868.

To the Editor of THE JOURNAL:

Your bill of November 1st is received. Enclosed find post-office order for $10, for which please receipt and return. I thank you for your indulgence. The times have been hard with me, or I should have remitted sooner. The offer of discount is a kind one upon your part, but I consider that THE JOURNAL is worth its price, and I send you the full amount. Continue sending it to me. I can't do without it. It is the best I have seen. Very respectfully.

Hereafter, all letters and communications to the Editor of THE JOURNAL will be addressed, CHICAGO MEDICAL JOURNAL, No. 71 Dearborn Street Chicago, Ill. The box at the post office has been discontinued.

News and Items.

Dr. Lockhart having resigned the Superintendency of the Indiana Insane Asylum, the Board of Trustees have elected Dr. Orpheus Everts, of Michigan City, to the position. An appointment eminently "fit to be made."

S. E. SCANLAND, M.D., a well known graduate of "Rush," has drawn a first-class prize in the great lottery of of life, having captured and led to the hymeneal altar, the beautiful and accomplished Miss Agnes Leonard, well known to the literary world as "Mollie Myrtle." Rev. D. P. Henderson officiated. The very best wishes of THE JOURNAL attend them.

The entertainment given by the profession and citizens of Philadelphia, to Professors Gross and Pancoast, on their return from Europe, proved an eminent success, just as it should have been. We shall give an extract from the beautiful address of Prof. Gross in the next number.

The latest editions of Flint's Practice of Medicine, etc.; the second volume of Aitken's Practice, are respectively on file for speedy notice.

The New York Hospital is to be torn down, and the grounds leased for $140,000 annually. The Hospital will be reërected at Bloomingdale.

The policy is announced that hereafter surgical and medical appointments in the army, navy, and civil service of the government will be made only as subservient to political considerations. The notice seems to be a work of sepererogation.

W. ALPHONSO WOOD, M.D., a highly respected practitioner of medicine, is reported to have died recently and suddenly. The notice sent to the JOURNAL is authenticated by no name or date. When they are sent us we shall publish the resolutions said to have been passed by a local society on the occasion. Dr. Wood was one of nature's noblemen, still further ennobled by professional and civic culture.

Books Received.

Transactions of the American Medical Association, Instituted 1847., Vol. XIX, Philadelphia; printed for the Association. Collins, printer, 705 Jayne Street, 1868 Pp. Notice next month.

THE TWELFTH EDITION OF ELLIS'S MEDICAL FORMULARY, heretofore frequently mentioned in THE JOURNAL, has come to hand. Pp. 374. W. B. Keen & Co., Chicago.

This is really a *new* edition of a well-known work. Many formulæ of little value have been omitted, the table of doses has been carefully corrected, and new formulæ of value have been introduced. The new classes of anti-emetics and disinfectants, and also the use of atomized fluids receive careful attention. A new feature is introduced in a full index of diseases, with references to the members of principal ingredients of the formulæ applicable to each.

A HAND BOOK OF VACCINATION, by Edward C. Seaton, M.D., Medical Instructor to the Privy Council. Philadelphia: J. B. Lippincott & Co., 1868. Pp. 383.

A complete *resume* of what is known on the subject. We shall refer to it hereafter.

A TREATISE ON PHYSIOLOGY AND HYGIENE, for Schools, Families and Colleges. By J. C. Dalton, M.D., Prof. of Physiology in the College of Physicians and Surgeons, New York. With Illustrations. New York: Harper & Brothers, Publishers. London: Sampson Low, Son & Marston. 1868. Pp. 399.

The professional reputation of the author of this book is fully sustained in this most dangerous of all books to write. It is every way reliable, compact, clear, fully adapted to the purpose set forth in its title.

THE OPIUM HABIT. With Suggestions as to the Remedy. New York: Harper & Brothers, Publishers, Franklin Square. 1868. Pp. 235. Notice next No.

In the next number also we shall mention our exchanges, particularly those non-professional. We regret the paucity of

our pages, and only regret that we had not double the room to contain the *crowd* of good things that are now pressing upon our pages. An immensity has to go over to subsequent issues.

CONSTIPATED BOWELS: The Various Causes, and the Different Means of Cure. By S. B. BIRCH, M.D., Member of the Royal College of Physicians of London, etc., etc., etc. From the third London edition. Pp. 181. Philadelphia: Lindsay & Blakiston. 1868. Price, $1.25, at Keen & Co.'s

A very creditable monograph, and well worth perusal. The author is evidently a man of practical common sense. The name of the publishers is sufficient guaranty for the style of the publication.

PROCEEDINGS OF THE CHICAGO MEDICAL SOCIETY.

DURING the past few months, the meetings of this Society have been held but once in four weeks. Hereafter they will be held weekly. The following are instructive cases, with the report of which pathological specimens were presented:

REMOVAL OF A LARGE OVARIAN TUMOR — RECOVERY.

Prof. Powell presented an unusually large ovarian tumor, which he had removed from a patient, thirty years of age. The patient first observed a slight swelling of the abdomen, about a year ago, the growth of which, however, did not cause her special inconvenience till January last. From this time to the day of the operation, August 31st, the abdomen became very rapidly distended. Paracentesis had quite recently been twice performed by other physicians, with the discharge of very little fluid. The tumor was removed through an opening in the abdomen, extending from the ensiform cartilage to the symphysis pubis. Before the tumor could be brought through the opening, it was necessary to evacuate large quantities of fluid from several cysts, and to break up with the hand several extensive adhesions. After the peduncle was firmly tied with a strong linen cord, it was divided and returned within the abdomen. The external wound was closed by means of twisted sutures, and supported by a flannel bandage. The tumor, with the serum contained in its cysts, weighed sixty pounds. The patient made a rapid recovery with scarcely any marked excitement of the circulation, diminution of appetite, or loss of sleep.

CANCER OF THE STOMACH.

Dr. Bogue exhibited the stomach of a male patient, 69 years of age, who had never, with scarcely any exception, suffered from sickness, till a year before his death. He first experienced slight symptoms of dyspepsia. There was gradual loss of appetite, with emaciation. Four months previous to death, there was first observed a small tumor, with tenderness, in the region of the stomach. The symptoms increased in severity, although at no time was there much acute pain or much vomiting. On the tenth of July he was wholly unable to swallow. From this time to the day of his

death, August 29th, he was nourished by nutritive enemata. At the autopsy, the stomach was found very much thickened and contracted, with a very narrow passage through it, and almost no trace of mucous membrane. The other organs of the body were from a similar disease.

CONCRETION FROM THE FEMALE URETHRA.

Prof. Miller exhibited a small concretion, one-third of an inch long, and one-half an inch in circumference, which he had found impacted in the urethra of a female twenty-five years of age. It was peculiarly grooved in such a manner that the urine could slowly escape through it, even when the mucous membrane was constricted around it. The case was interesting from the fact that it had been under the care of three different physicians, who had treated it as inflammation of the bladder, or as uterine disease.

RAPID INFILTRATION OF A LUNG WITH TUBERCULOUS MATTER.

Prof. Ross exhibited the left lung of a young man who died at the Cook County Hospital. The case was most remarkable from the fact that the patient had been strong and rugged till eight weeks before death. He died two weeks after entering the hospital, with the characteristic emaciation, hectic night sweats, and expectoration. There was almost no respiratory motion on the left side. The left lung was found almost completely solidified with tuberculous deposit. There were large cavities at the apex.

Prof. Ross also presented a typical specimen of "hob-nail liver." The organ was covered with the characteristic nodules, and weighed but one and three-fourth pounds. The patient, a female aged twenty-five years, had been of intemperate habits. Death occurred two weeks after the patient entered the hospital, with all the symptoms of typhoid fever. The characteristic lesions of this disease were found in the ilium.

SARCOMA OF THE CHOROID.

Dr. Holmes exhibited an eye which he had recently removed from a patient at the Chicago Charitable Eye and Ear Infirmary. There was a well defined tumor occupying the external and lower portion of the globe, and extending from very near the ciliary muscle to the optic nerve. At the first examination, three weeks previous to the extirpation, the tumor could be readily seen by concentrated light, and still better with the ophthalmoscope. There was no perception of light except at the inner and upper portion of the retina. The pupil, of normal size, acted quite freely under the influence of light. There had been no pain. The globe was not hard on palpation. The cornea had not lost its sensitiveness, although an increase of the intraocular tension and loss of sensibility of the cornea are very frequent symptoms of choroidal tumor. There was no trembling of the retina, which is usually observed when there is detachment of the retina. It was nearly a year since the patient first observed any impairment of vision. Two days before entering the Infirmary, the patient presented himself, suffering excruciating pain in and around the eye, with much redness and œdema of the conjunctiva and hæmorrhage behind the lens. These symptoms had appeared very suddenly. A horizontal section of the globe after its removal revealed a sarcomatous tumor of the choroid, situated as above described. The central portions consisted of a soft, pulpy, yellowish red mass, surrounded by a layer of black tissue, nearly a line in thickness. Dr. Lyman made a microscopic examination of the specimen, and states that the tumor is sarcomatous, with characteristics as described on page 460 of the translation of Stellwag. The outer portion of the tumor is dark from the presence of black pigment in many of the cells.

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CASE OF HEPATIC ABSCESS,—EVACUATION OF PUS, VIA BRONCHIAL TUBES,—RECOVERY.

BY S. T. ODELL, M.D., ST. LOUIS, MIAMI COUNTY, KANSAS.

TUESDAY, September 8, 1868, was called to see Nathan C. Farmer, aged 45, married, of robust build, and massive osseous frame. Patient very thin in flesh, and weak; has an almost constant cough; believes himself ready to die of pulmonary consumption, and really appears to be but the wreck of the strong, muscular man he evidently once was. Obtained from the patient, and his wife, substantially the following statement, as to his condition prior to my seeing him: About the first of June last, being in good health, and (per his own assertion) "about the best man in the county," he was at work on his farm, building fence, when he was attacked with a tolerably severe pain in his right shoulder, which continued, with slight intermission, for near a month. About the same time he first noticed a cough, which troubled him somewhat, especially at night, and which grew worse, in spite of such popular remedies as are generally used by rural persons in cases of "bad colds, coughs," etc. Not being of a disposition to succomb to any slight ailment, he continued, as best he might, his usual farm

labors, though there soon supervened to the existing symptoms, a feeling of lassitude and sense of debility; said that when down he could scarcely muster courage to attempt to get up, and that he could only plough a "round" or so, until he was completely tired out, and had to take rest. His appetite was but slightly, if at all, impaired; and he was not conscious of any actual diminution of strength, but rather of endurance. He had no respiratory trouble, save the cough mentioned; no chills; no fever; bowels were regular; no jaundice; and no pain, save in the shoulder. So until about July 1st, 1868, when his cough grew worse, and he was seized with a dull, heavy pain, referred to the right hypochrondriac region. This increased in severity for four or five days, when, in a paroxysm of coughing, he became almost suffocated with a sudden flood of "matter," says he "coughed up nearly a quart before he could quit coughing." For four or five days previous to this expulsion of pus, he had found decubitus on his left side or back, intolerable from the pain it caused, and for the two weeks next preceding the 4th of July, had experienced continually a feeling of drowsiness, and disposition to sleep, which could scarce be resisted, even when in conversation with neighbors who called in to see him.

After this the expectoration of pus was a matter of daily, and almost hourly, occurrence, and it is stated to have been, from the very first, of most horribly fetid odor. At this juncture he first called medical aid, and was treated for *Bronchitis*, grew worse for a month, and changed physicians. The last one employed also treated him for Chronic Bronchitis. I am not aware of the kind of treatment instituted by either of them. He continued growing worse, however, and at the time I was called complained of exhausting night sweats, said he could get no rest of nights, on account of his cough, and was, as above stated, very much emaciated.

On exploration of the chest, I could detect no disease of the lungs, save bronchial inflammation, confined to the lower portion of the right lung, — rather diminished resonance on percussion at that point, and slight interference with the respiratory

murmur there. Pulse averaged about 85. I did not, at this time, obtain nearly so complete a history of his case as is given above. He had not told me of the *sudden accession* of stinking pus, to the ordinary sputa which occurred about July 4th, and, although he complained that of mornings the expectoration was more profuse, and smelled worse than during the day. I was disposed to credit this partly to the mere accumulation of mucus in the bronchial tubes, during the hours of recumbency, and partly to the exaggeration of a thoroughly frightened patient. I was led to this conclusion by an examination of the sputa expelled while I was there, which did not reveal the characters he ascribed to it. Although convinced of the gravity of the case, yet as my diagnosis was by no means clear, I confined medication for the present to a mixture of *Muriate of Ammonia*, *Morphia*, and extract of *Taraxacum*, directed to the cough, and tincture of the *Chloride of Iron* as a tonic.

September 18. While conversing with Nathan, he had a paroxysm of coughing, in the course of which he cast up at least three ounces of greenish yellow pus, mixed with mucus, and of the most offensive odor imaginable; nothing ever before assaulted my nostrils to which I can justly compare it. I now saw that I had underrated the value of his previous statements regarding it, and by interrogatories elicited the facts above given. On examination I found no change in the condition of the lungs from that above stated, and so extended my observations to the region of the liver. Found quite a depression externally in the right hypochondriac region, and considerable tenderness on pressure, at a point corresponding to the centre of the line of junction of the epigastric and right hypochondriac regions. The patient now stated that his side "was bulged out for awhile, but when he coughed so hard in July and August it got caved in!" It was with some difficulty that I could detect the inferior margin of the liver under the border of the ribs. Aware that the mere expectoration of pus could not be regarded as diagnostic of Hepatic Abscess, and that an empyema opening into the bronchial tubes, would cause the symptoms

recorded; I diligently examined him with reference to the latter affection. I could find no symptom indicating such a condition, save those mentioned, and a slight dullness on percussion over the inferior portion of the right lung. The pneumothorax, which must have been present, had this condition obtained, was absent. There were no signs of any marked compression of the lung. The history of the case did not present any symptoms of the pleuritis, which must have antedated an empyema, and I was led to the conviction that I had an hepatic abscess to deal with; one that had been discharging pus through the lungs for seventy-six days, in undiminished quantities, and with a constant aggravation of the general symptoms. I may, however, except the cough, which had not been so troublesome since the use of the *Ammonia* mixture. I ordered a full nourishing diet, and out door exercise as he could bear it. Gave him *Citrate of Iron* and *Quinia*, gr. v., immediately before each meal, and tincture of *Chloride of Iron*, gtt. xx., two hours after breakfast and dinner, and confined my pulmonary medication to simple anodyne, I also applied a plaster of *Pitch* and *Cantharides* over the right hypochondrium.

September 28. Patient improving. No purulent expectoration, save upon first assuming the erect position on arising from bed in the morning, and then in diminished quantity. Continued treatment internally, removed the plaster, and substituted painting the part with *Tincture of Iodine*, each alternate night.

October 20. C. still improving. Purulent expectoration entirely ceased several days ago. Is gaining flesh and strength rapidly. Discontinued the *Tincture of Iron*. Continued the *Citrate*.

November 12. C. reports himself well; says he quit taking medicine two days ago. He looks rather slim yet, but states that he is able to do a great deal of the work about the farm without feeling wearied. On examination, I find still a marked depression in the right hypochondrium, and percussion reveals the fact that his liver does not occupy nearly the space it should normally.

It is admitted on all hands, that Hepatic Abscess is a rare

affection in temperate climates, and the gravity of the affection is also universally conceded. Louis, indeed, is stated to have denied that recovery ever took place in cases of this disease, founding his opinion on the fact that he was never able to discover cicatrices in the liver. Dr. William Stokes, however, mentions meeting a cicatrix in the liver of a person who died in Meath Hospital, Dublin, of chronic enteritis, and who had, while in India some time previously, suffered from Hepatitis. Dr. Stokes, also, makes the statement, that the evacuation of the pus through the diaphragm, and into the lung, is by far the most *favorable* of the internal openings which the abscess may make. Prof. Chapman, (*Thoracic and Abdominal Viscera, Philadelphia*, 1844, *p.* 316), never met with a case in which the pus was avacuated in this manner, admits that such cases have been reported, but speaks doubtingly of all reported recoveries. Gibson (*Surgery, 7th 2d, Vol.* 1, *p.* 137), says few patients recover after the matter has been discharged, via either the lungs or bowels. Watson (*Practice of Physic*) regards this mode of exit for the matter as *fearfully perilous*, and reports having never met with but three such cases. These are all the authorities I have been able to consult on the subject since the occurrence of my case. Excepting Dr. Flint's valuable work on Practice of Medicine, and as the latter is so generally found in the libraries of the profession of to-day, it is hardly worth while to quote therefrom, save the statement that there were, of two hundred and three cases collected by Ronis, one hundred and sixty-two deaths; and of eight cases, uncomplicated with dysentery, and opening through the bronchial tubes, six recoveries.

This statement would not seem to support the assertion of Watson, that such cases were fearfully perilous, or the doubt of Chapman, that they ever recovered. One word as to diagnosis, nothwithstanding the popular idea that pain in the right shoulder invariably points to "disease of the liver," and that my patient complained of pain at that point, I do not think the most veteran routinist would have diagnosticated Hepatic derangement from the symptoms present at the outset of his

complaint. Many, indeed most, of the symptoms attending the suppurative process were absent, and nothing certainly pointed to abscess of the liver, prior to the discharge of pus, *per orem*, July 4th. At my first visit (September 8th) the diagnosis was not correctly made out, partly by reason of the patient not giving me a full history of his case, and partly because he did not happen to expectorate any pus in my presence. Once on the right track, the diagnosis was not difficult.

The case is reported partly on account of the rare occurrence of the disease in this climate, and as a slight contribution to the literature of the subject, and partly on account of the interest which attaches to it, from the fact that it was for over two months under routine treatment, and unrecognized; nor can I arrogate any great superiority of skill in diagnosis over those who thus treated the case; for, as the record shows, I made the mistake of treating the patient for ten days, without a just appreciation of "what was the matter," and was at last put in the right road to a diagnosis, by the accident of the patient's expectorating pus, at a moment when I happened to be present. This, when a thorough examination on my part in the first instance could not but have revealed the true state of the case. By experience we are taught; and perhaps it would be better if, in our reports of cases, we more generally than we do, recorded also our mistakes. Such records, however, are, like the disease my patient had, "rare in this climate."

Novel Treatment of Sunstroke.

Dr. F. G. Herron, one of the City Physicians of Cincinnati, Ohio (*Med. and Surg. Reporter*), has tried in two cases, with success, the following treatment in sunstroke: Warm water was applied to the head, on cloths, as warm as the skin could bear without injury. Consciousness was very soon restored. Liquor ammoniæ acetatis was administered internally as a stimulant.—*Exchange.*

DILATATION OF THE OS UTERI AND PERINÆUM DURING LABOR.

BY GEORGE KILNER, M.D., OF SULLIVAN, ILL.

Read before the Esculapian Medical Society, Kansas, Ill.

MEDICAL men who have had much experience in the practice of *Obstetrics*, must have been observant of the fact, that an unusual rigidity of the *os uteri* and *perinæum* are the principal causes of protracting the pain and agony of parturitions. The contractions of the *os* may come on every few minutes, and apparently with an amount of force sufficient for safety. Yet he is mortified to find, upon examination, the *os* undilated, and to all appearances undilatable, while the pains during this stage of labor we are speaking of, are often very distressing, and are denominated by women as a grinding or cutting sensation, frequently producing great anxiety, depression of spirits, and impatience to obtain relief, it now becomes a matter of importance to keep up the spirits, and maintain the confidence of the patient; this is easily done if the labor is a short one, but if it proceeds slowly through the night, and if the following day advances and still no prospect of a speedy termination, the patient begins to doubt whether she is receiving proper assistance, and those about her look suspiciously at you, they calculate the number of hours the labor has already lasted, they *wonder* it is not further advanced, and you are made to feel, both by looks and hints, (which are sufficiently intelligible), that your competency is thought to be rather questionable; when you find yourself in this situation, you will have considerable difficulty in persuading the females present, "*that all is right*," because they can not duly appreciate the obstacles to be overcome, in cases where the *os* remains unyielding for a protracted period. Now the ques-

tion should arise in the mind of every humane accoucheur, What means may, with all confidence in their safety, be resorted to, to restore force to those natural processes? and thus remove all difficulties in the way to a speedy parturition. The usual routine of practice in such cases are well known — a *venesection*, a solution of *Ant et Pot Tart.* — *warm stupes to perinæum*, warm teas, *Ex. Belladonna*, *Opium*, *Ipecac*, *Chloroform*, etc., and then comes patience. But with what feelings of humanity can the attendant physician calmly advise patience to a woman well nigh exhausted by painful throes and agony, which, perhaps, may have already continued for twelve, eighteen, or twenty hours, or even more; when her frail and weak body, prostrate and helpless before him is agonized by fruitless contractile efforts of the uterus, to free itself of its burden, when with plaintive wails she beseeches him, at the end of every pain, to save her! who can sit listlessly by, under such circumstances, and advise *patience, be still* — she *can not* be still while racked by the dreadful exertions of the uterus. What then is the accoucheur to do? what can he do? simply resort to some measure to overcome the tension, or rigidity, of the parts implicated in delaying the advance of the fœtal head; but he has already tried bleeding, *Antimony*, warm teas, *Ex. Belladonna*, *Chloroform*, *Opium*, poultices, *Ipecacuanna*, etc., and yet hour after hour elapses, with little or no perceptible change under such circumstances should we be justifiable in using the knife, as recommended by some, for instance Dr. Marion Sims, who has won a world-wide reputation; see, also, Dr. Baker Brown's practice; also, Dr. Hilderbrandt, of Konigsburg, he gives a brief account of nine labors, in seven of which "primiparæ," advanced in life, suffered from rigidity of the os uteri, against which *Ipecac*, *Opium*, poultices, baths, bleedings, and *Chloroform*, were all unavailing. Incisions were made; after which all were fortunately terminated. Incisions were also made, with a like favorable result, in one case of convulsions, and one in "prolapsus of the cord." He remarks, "the operation is chiefly indicated, however, in

morbid conditions of the vaginal portion of the cervix. Such as rigidity, hypertrophy, and malignant disease, for forced delivery, with a healthy cervix, the incisions should be six or eight in number, and not more than three lines in depth." Now, admitting that the womb and its appendages *will*, in many instances, bear such severe surgical treatment, when employed for surgical diseases, are we, therefore, to feel warranted in submitting any poor woman's womb, which should happen to be a little tardy in the completion of its high office of sending a human being into the world, and fulfilling one of its noblest physiological functions, to the tortures of surgical treatment.

As all these measures have been advised, in certain cases, by the highest obstetrical authorities, I would inquire how they will compare, in point of mildness, with the following treatment, when all other means fail, and before resorting to the knife or forceps, let the accoucheur, without fear or prejudice, try one other remedial agent, let him introduce a suppository, prepared after the following formula,

℞ Lobelin, grs. v.
Coca Butter, ʒj.,

into the rectum, immediately upon the subsidence of a pain, also, anoint the os with the same, by placing a small quantity upon the finger. Fifteen or twenty minutes retention is generally sufficient to produce a wonderful effect.

Lobelin is the most powerful relaxant in the Materia Medica, and one from which no danger need be apprehended, when used as above recommended. Its peculiar powers are speedily diffused by contiguous and continuous sympathy to the os, while the perinæum and supervening pains show a manifest dilatation of the os and perinæum, if hitherto rigid, yields readily to the advancing head. Never have I been more convinced of the superior efficacy of the above treatment, then in the attendance and delivery of cases during the past four years, as the following case will, among many others, show:

At 10 o'clock, P. M., March 29th, 1864, I was called to attend Mrs. T., primipara, American, aged twenty-six years, who had been in hard labor for sixteen hours previous to my being called in; upon my arrival, the midwife in attendance informed me that she supposed the head was too large to pass through the bones of the pelvis; she stated that the head had not advanced any for seven long hours previous to my arrival, and now, in her exhausted state, with a threatening of eclampsia, had sent for me to deliver the woman by the aid of instruments.

Upon an examination, I found no difficulty in the size of the pelvis, and the head was free and rotating against a rigid and firm perinæum, so all we would have to do were to use such means as would overcome the rigidity of the parts implicated, and produce a speedy relaxation to the parts indicated, for the poor woman was almost in a state of insensibility from the agonizing pain. The time for bleeding, etc., had passed, or to advise *patience*, but we simply introduced a suppository, prepared after the following formula,

℞ Lobelin, grs. v.
Coca Butter, ʒj.,

into the rectum, and anointed the fœtal head with the same, in a few minutes after the application the perinæum relaxed, apparently as thin as tissue paper, and the crown projected beneath the pubal arch, and, at the ensuing pain, the child was born. As to dilating the perinæum, this case satisfied me that the recent researches are correct, that this organ possesses contractive and dilative force, of a character not unlike that of the uterus. It is well known that its unyielding resistance often retards labor more then an unyielding os, especially in primiparous cases; indeed, an unyielding os and an unyielding perinæum are often concomitants.

On the 12th of June, 1866, about 1 o'clock, A. M., I received a call to attend Mrs. R., a thin, spare woman, in labor with her fourth child; the pains had been strong some hours before my arrival; upon an examination, I found an exceed-

ingly rigid condition of the soft parts, and the os but slightly dilated. I put her upon the use of an antimonial solution, with *warm stupes*, to perinæum. I then lay down to await the effect of the medicine, with orders to call me whenever they should think it necessary. At six next morning I found my patient much exhausted, and in a continued agony of pain, and of fruitless pain, for even now I could with difficulty pass my index finger through the "ostium vaginæ," — but little dilation had ensued, and an unusual mass of rigid muscles seemed to line the pelvis and guard the outlet. Exceedingly discouraged, I administered *Chloroform*, in half drachm doses, mixed with sweet milk, every thirty minutes, until three doses had been taken; after waiting three hours, and no change having taken place, except for the *worse;* and amidst the fears of the husband, and cries of the woman for help, that she would die — the patient being a sensitive woman, and subject to hysterical fits. At this stage convulsions set in, and appeared to be of the usual character. Stertorous breathing, foaming at the mouth, stiffness of the extremities, beating of the cervical veins, teeth clenched, twitching of the facial muscles, mouth drawn on one side, etc., then followed a state of repose.

Under the impression that the woman would not survive the birth of the child, I concluded, as a last resort, before sending for counsel, to try the following,

℞ Lobelin, grs. v.
Coca Butter, ʒj.,

Mix into suppository. This I introduced into the rectum; also, anointed the os with the same, applying it with my finger, and lubricating the parts, in a short time I found, upon examination, that the os uteri had relapsed its rigid grasp upon the vertex of the child, and the whole crown was pressing against a soft, yielding perinæum, and without any more convulsions the child was born. I then put her upon the following,

℞ Chloroform, ʒj.
Gum Acacia, ℥j.
Aqua Camph, ℥j.,

Mix into an emulsion. Dose, teaspoonful whenever the pains require it. She made a safe recovery.

In conclusion I would say, *Lobelin* used thus in obstetrical practice, is a pure and safe relaxant; and in cases where the pains are irritable, os uteri rigid, perinæum unyielding, and secretions scanty, the above treatment will generally remove all difficulty — while the uterine contractions, and action of the abdominal muscles are not interfered with, and where bleeding may be objected to on account of a weakly or debilitated habit, at and after parturition, for the patient's safety, and in all cases of dry labor, he will find in such cases it will aid the flow of the proper secretions; it also obviates convulsions, when threatening in protracted labors, from causes cited above, by its excito-relaxant powers, changing the base of excitement from the brain to the rectum, and contiguous parts; and is also a sure remedy to facilitate labor, when retarded, and will bring the labor to a close, and save the time and suffering spent in long lingering cases, and assist nature to perform her function, with safety to both mother and child.

DIGITALIS, ITS USE IN SUPPRESSION OF URINE.

BY JAMES T. NEWMAN, M.D.

Was called, November 5th, 1868, to see a patient, who stated to me that he had been unable to pass his urine for two days. Vomiting and nausea had set in, with great pain in the lumbar regions. Also, severe headache, with a quick bounding pulse. Here evidently was a case of retention or suppression. I passed the catheter, in order to determine what was the matter; its introduction was not followed by the least particle of urine, then I knew that I had a case of suppression. Ordered him to have

℞ *Hydrargyri Chloridi*, gr. xij.
Pill Gambogiæ, Comp.
Ext. Colocynth, aa gr. xv.
Syr. Zingiberis, q. s.
Misce fiant pilula, No. x.

Sig. one every three hours, at the expiration of three hours to have a bottle *Citrate Magnesia.*

Visited him in the evening, found his bowels had been moved, but no urine. He was in great pain, and sinking rapidly. I ordered him to have a Turpentine bath; that is, to saturate a piece of flannel with *Spirits of Turpentine*, and apply to both sides of the spine. Take an iron, moderately warm, and bath the parts until the flannel is dry.

Ordered him to have

℞ *Potassæ Bitartratis*,
Acidi Boracici, aa ʒ ij.
Aqua pura, ℥ xij.

Misce. *Sig.* wine-glassful every hour. Left him for the night.

November 6th, found him no better than when first seen. No urine yet. My attention had been called to an article on the same subject, in Braithwaite, page 172, No. LVII., which spoke very highly of *Digitalis.* To tell the truth, when I commenced the practice of medicine, through a blunder of mine, I became prejudiced against *Digitalis.* I had determined in my mind never to use it. Here was the life of man in the way of my early ignorant convictions. I decided to give it a trial, ordered *Tr. Digitalis* ʒ ij., and a poultice of warm linseed meal, to be applied to the lower part of the abdomen. This was done at 8 o'clock in the morning; called to see him at three the same day, and found the urine flowing freely. Result, he made a rapid recovery.

Case 2nd. — November 20th, 1868, was called to see a gentleman similarly affected; no time was lost, gave him a brisk cathartic, and applied the *Digitalis* in the same manner as in case first; in six hours he made water with perfect ease. In

presenting these facts to your many readers, it will be seen that I claim nothing new, but I do think that the drug deserves a trial.

INTERESTING CASES SUCCESSFULLY TREATED WITH PEPSINE.

SINCE the introduction of *Pepsine* into therapeutics, by Dr. Corvisart, and M. Boudault, chemist, it has been gaining steadily in the estimation of the medical profession. We have transcribed a few very interesting cases, treated with this remedy, from the work of Dr. Corvisart, on "Dyspepsia and Consumption," showing its peculiar adaptability to many disorders of the digestive functions:

CASE I.—Communicated by Dr. A. Longet, member of the Academy of Medicine. *Typhoid Fever.— On the twenty-fourth day, the patient can not yet support any food, even the lightest. The administration of Boudault's Pepsine, in powders, produces immediately easy digestions. On suspending the remedy, as a test, the old symptoms re-appear, with violent pain in the stomach and diarrhœa. The treatment is continued for ten days, when the patient digests perfectly without any help.*— Miss ***, 15 years, pupil of the "Maison Impériale d'Ecouen," on the twenty-fourth day of a serious typhoid affection, although convalescent, was in an alarming state of debility, because she could not support any food, not even the lightest. I ordered her Boudault's *Pepsine* in powders. The first half dose, which was administered in tapioca broth, acted so well, that a second in the same conditions was given to the patient three hours after the first, and was digested without fatigue. The second day the same result, with three broths and a raw egg. The third day the dose was intentionally omitted from the first broth in the morning, and this caused violent pains in the stomach and intestines, and a watery stool. The two others, however, which were administered the same day, and contained each half a dose of *Pepsine*, resulted in a complete and easy digestion. The fourth day of the administration of *Pepsine* the patient ate soups and chicken. After this a more and more substantial food could be given, but every time the dose was suppressed for a meal, the digestion was more or less painful. This state lasted ten days, when the digestion became normal. During this time there existed generally a decided constipation, which, however, gave way under the simplest remedies.

CASE II.—From Dr. Berthelot, of Paris. Miss B. complains of a heaviness in the stomach, and a very difficult digestion, especially of the evening meal. This state, which dated back a whole year, continuing, notwithstanding a varied medication, I prescribed for her one dose of *Pepsine wine* Boudault, at each evening meal. From this time on she digests much better; as soon as she stops these doses, and I have tried it many times, she digests with more difficulty, and the epigastric pains re-appear immediately. The taking of *Pepsine* always renders the digestion painless and easy.

CASE III.—Communicated by Dr. Cahagnet, of Napoléon-Vendée. After a habitual dyspepsia of seven years, with debilitated digestion and loss of strength, disease which resists tonics, purgatives, narcotics, vegetable charcoal, and Seltzer and Vichy Waters, a serious endocarditis sets in. After curing this, the dyspepsia increases; notwithstanding bitters, Vichy Water, etc., no nourishment can be supported; the patient becomes weaker, and vomits every thing, even soups and beef tea. The *Syrup of Pepsine* of Boudault is prescribed for eight days; the digestion is good from the first day, and the alimentation is rendered more copious and more substantial. Strength returns sufficiently to allow walks in the garden.

CASE IV.—From Dr. Parisse, Professor at the "Ecole de Medecine" of Lille. *Obstinate vomiting during pregnancy.*—This case was a young woman of a very weak constitution, of irregular habit, and subjected for a long time to the use of ferruginous preparations, when she became pregnant for the first time. At first I only suspected her state of pregnancy. The stomach troubles become so disquieting, that I prescribed Boudault's *Pepsine* in powders. She used these for fourteen or fifteen days. From the very first day the digestion was better, her condition continued to ameliorate, and soon she could digest without this remedy. It is important to state, that pregnancy had arrived at the fourth month; perhaps the change in the digestion might be attributed to the modifications which the uterus undergoes at this time. Still I do not doubt that the remedy has been really useful.

CASE V.—Communicated by Dr. Huet, adjunct physician to the "Maison Impériale de la Légion d'honneur at Ecouen." Gastralgia of several years standing, resisting the action of antiphlogistic, bitter, ferruginous and antispasmodic remedies: Boudault's *Pepsine* is given, and immediately the digestion is good. The remedy is stopped during four days; all the symptoms re-appear. The *Pepsine* is again taken for twelve days, and the disease disappears. Twenty seven days have elapsed since the remedy has been stopped, and, as no symptoms have re-appeared, the cure may be considered perfect.

CASE VI.—From Dr. O. Landry, ex-interne of the hospitals. Dyspepsia, with painful digestion, swelling, eructations, pain and loss of appetite, and subsequently chlorosis. Calcined magnesia and iron were tried without success. By means of the *Pepsine* Boudault's, the digestion becomes good from the first meal.

CASE VII. — From Dr. Berthelot, of Paris. M. P., thirty-six years of age, of a bilioso-nervous temperament, a great smoker, was for two years troubled with painful digestions, and vomited almost every day after dinner. A lighter diet, and a greater moderation in the use of tobacco were prescribed, but did not in any way help the digestion. I prescribed for him a dose of *Pepsine Boudault*, to be taken at breakfast and at dinner, in the first spoon of soup. During ten days this treatment was continued; the patient digested better, and the vomiting stopped; when the treatment was suspended. Two weeks after he came to thank me; he assured me that he was very well, vomited no more, and digested perfectly.

CASE VIII. — From Dr. A. Godart, corresponding member of the Academy of Medicine. Miss E., vice-principal of a boarding school, thirty years of age, came to consult me the 7th day of January, 1854; she complained of pains in the stomach, which increased but little by pressure. Far from having an appetite; she felt a disgust for all food, the digestion of which was painful, and especially for the evening meal; she slept badly during the night, experienced often spasms and oppression; and could not attend to her duties but with much pain. I prescribed a dose of *Pepsine Boudault* at the beginning of dinner, and morning and evening a pill of extract aconite and stramonium. But the pharmacist, having cautioned the patient to be careful not take more than the prescribed dose, because the remedies were active and dangerous, she was frightened and took none at all. She continued to take the *Pepsine* only for twenty-four days, and to-day, the 23rd day of February, she tells me, that from the second day she felt better, from that time the digestion was re-established, the appetite returned, after some days the spasms and oppression disappeared, she passes comfortable nights, and since the beginning of the month, when she stopped the use of *Pepsine*, she has continued to be pretty well, but the appetite is not as good as when she was still taking it.

Ovariotomy.

Dr. Dunlap, of Springfield, Ohio, has performed ovariotomy on 36 patients, since 1843. Of these, 13 were unmarried. The operations were all by the long incision, and only two were without anæsthetics. Nine died after operation; one from peritonitis, two from hæmorrhage, one from chloroform, one from accidental overdose of morphine, one complicated with cancer, one from exhaustion, one from congestion of the brain, and the ninth from excessive vomiting. Three of the successful cases have died since their recovery from the operation, of other diseases; the remainder are all now living, and in good health.—*Boston Med. Jour.*

CORRESPONDENCE.

SHELBYVILLE, ILL., *November 30th*, 1868.

To the Editors CHICAGO MEDICAL JOURNAL:

If you think the following will be of sufficient interest to your readers, please insert.

TOBACCO AS A CAUSE OF INDIGESTION AND HYPOCHONDRIA.

For some twenty-seven years I was an inveterate chewer of tobacco, and during nearly all this time I suffered severely from indigestion. I could eat scarcely any thing that did not give me severe pain, with a great thirst for water. I became almost a skeleton, and suffered from lowness of spirits. I passed large quantities of urine, having frequently to get up three and four times during the night to evacuate my bladder, passing from two to three quarts of water. The consequence was, instead of being refreshed I would rise from my bed wearied and exhausted. I dieted, and took various kinds of medicine, all with only very temporary relief. At times I was scarcely able to attend to business; life was really more burthensome than otherwise. I was convinced that tobacco was injuring me. I resolved to quit it. It is now nearly two years since I parted with my old friend tobacco, the result is, I have gained some twenty-five pounds in flesh, can eat almost any thing with impunity; can sleep all night, without being disturbed with my urinary organs, and, in short, feel like a new man. I would say to the craft, if there are any suffering from dyspepsia or lowness of spirits, if you use the weed, *tobacco*, quit it immediately.

Yours respectfully,

J. M. HARNETT.

BOOK NOTICES.

THE PHARMACIST. — We have received the second number of this periodical, and take pleasure in congratulating the Chicago College of Pharmacy, on the very creditable appearance presented by its organ. The Pharmaceutists of Chicago deserve already a high place in the ranks of their profession, and the organization of their College, and the establishment of their Journal, are movements in the right direction toward maintaining and increasing their excellence. The present number contains several interesting articles, which will well repay the reader, particularly those upon Prussic Acid, upon Carbolic Acid, and the comments of the "British Medical Journal," upon a "uniform principle of prescribing and dispensing."

The latter article contains some, not unmerited, strictures upon the lack of system, not to say carelessness, of physicians in prescribing, which might be profitably applied by many members of the medical profession. While acknowledging the justice of these comments, we take occasion, in this connection, to call the attention of the College of Pharmacy to a practice prevalent amongst certain self-styled pharmacists in this city, of dispensing medicines in packages bearing neither the name of the physician prescribing, nor the druggist dispensing them, nor even the patient for whom they were prepared. This has occurred twice, within a very short time, under the observation of the writer. The preparation ordered in the first instance, being a lotion, was received by the patient in a vial having, as a distinctive mark, a piece of wrapping paper, bearing upon its face a number in pencil. The lotion proved entirely inadequate to accomplish its purpose, and was replaced by a repetition of the formula, prepared by Mr. Mill, having a totally different appearance, and

effecting promptly the desired result. In the second instance referred to, the formula prescribed contained *Extract of Belladonna.* The preparation was received in a box, bearing a penciled number, but no other distinctive mark whatever. In this instance, also, the drug was inert, and had to be replaced as before. Under the circumstances, in case of accident, it would have been somewhat difficult to identify the offender, and we hope that the College of Pharmacy will redouble its efforts to purge its professional ranks from such reckless tamperers with human life. W. H.

EDITORIAL.

Abortion.

"CINCINNATI, December 7.—In July last a young woman, named Georgiana Ridgeway, was killed by an abortion, performed by a quack, styling himself Dr. D. A. Ross. Ross was arrested, and this afternoon was sentenced to seven years in the penitentiary." The above is contained in the telegraphic summary of news in the daily papers. Its perusal suggests the fervent wish, that the same jury, which rendered a verdict apparently so righteous, might be induced to become a permanent attachment to the judicial system of this quack-ridden community. Scarcely a month passes during which the newspapers contain no record of "one more unfortunate gone to her death," through the diabolical practices of the abortionist. The suspected perpetrator is, possibly, arrested, but never punished, and never will be, until a radical change has taken place in public sentiment, until there shall arise an earnest desire to eradicate this crime, which shall, in its turn, suggest honest efforts to suppress it. It is this earnest desire which is just now wanting, and in making this assertion we do not feel that we are underrating the moral sense of the American people, which we believe to be as unerring in its indications as its enlightenment will permit; for we believe

this want of desire proceeds solely from ignorance of the true character of this most prevalent crime. Impress this firmly upon the minds and hearts of the people, let them perceive the hideous reality, and the innate sense of rectitude of the human heart will effect what courts and juries now in vain attempt.

But how shall the moral sense of the public be enlightened, how shall they be compelled to see and know the truth? We answer, by keeping the *real truth* ever before their eyes; the truth naked, with all its deformities, uncovered by the drapery of deceptive and ambiguous phraseology, unvarnished by the gloss of social expediency and moral veniality.

But by what agency, and by what means, is this end to be accomplished? We believe that both are entirely within the scope of our own professional duties and capacities, and that the responsibility of the very existence of the crime, lies at the door of the medical profession. Let each physician, as a unit, satisfy his mind and conscience of his whole duty in this matter; and let him do it fearlessly, and *without respect of persons*, whenever occasion shall offer, and there will then be no necessity for co-operation, that tacit acknowledgment of integral weakness, which seeks support in mutual interdependence; no necessity for the profoundly moral preambles and denunciatory resolutions of Medical Associations and Social Science Congresses. We have said, that the responsibility of the existence of this crime lies at the door of the medical profession, for while a portion of it may, with apparent justice, be charged to the defects of our criminal code, which draws lines of demarkation between life and death, having no real existence, it must be remembered, that law, which, in the abstract, is but the expression of universal obligation and civil law, the expression in terms of civil and social obligation, is but a necessary deduction from science. If then the state of science be imperfect, its deductions must be erroneous. But science (that is the science of material things) is progressive, let law manifest progress also. It seems no more than simple justice, that a law, based in good

faith, upon contemporaneous physiological knowledge, should be expunged from our statute books, now, when more comprehensive investigations into physiological phenomena have demonstrated the fallacious character of the foundation upon which it rests.

The civil law makes the production of abortion, before *the period of quickening* a *misdemeanor*, and subsequent to that period a *felony* — the punishment in each case being nominally apportioned to the offence. Now, the fœtus in utero is an organism, and, like every other organism, must be in one or the other of two categories, viz.: it must be either dead or living; if dead, it will, like every other dead organism, revert to the domination of chemical laws, and sooner or later be resolved into its original elements; if it then be not dead, it must be living, and potentially a human being, needing but a few weeks to develop its potential capacities into actual faculties. The law, therefore, which withholds its protection from this human being, which denies to it the privilege of life, because it is not yet capable of fulfilling all the functions pertaining to fully developed life, is as arbitrary and unjust as that which would refuse its protection to the life of citizen, because he had not yet reached the age assigned for the assumption of all the privileges of full citizenship. Is the youth of twenty years and six months less a citizen because he can not vote? And is the fœtus in utero less a human being because it can not yet breathe, or the infant of six months because it can not walk or talk? If it be so, where shall we fix the limit of life, where shall we place the threshhold of human existence, and by what physiological or other phenomenon is indicated this wonderful transition from death to life, from non-entity to entity? Where is the jurist who will answer? for physiologists dare not attempt it.

But this same civil law declares the malicious destruction of human life to be *murder*, and assigns as the punishment of murder, death. But the massacre of the innocents perpetrated daily, throughout the length and breadth of the land, is only a misdemeanor.

For the assassin, who for hire plunges his knife into the back of citizen, public sentiment demands the gallows, and the law awards it; but for the meaner, more cowardly assassin, who, for his thirty pieces of silver, plunges his probe into the brain of the citizens' unborn child, public sentiment is dumb, and justice is blind. But it would be unjust to medical jurisprudence, to ignore the unequivocal terms in which its highest authorities have characterized this crime, *at whatever period of intra-uterine life committed, as murder.* Here then we have the authority of prescript, were that necessary, to corroborate the deductions of right reason and sound philosophy, from correct physiological data. Let every physician do his whole duty in this work of enlightening the public mind upon this subject; let him not hesitate to protest against the commission of this most despicable form of assassination, under any and all circumstances, no matter what the exigency, and to lend his efforts to accomplish the punishment of its perpetrators with equal impartiality, and the crime will soon cease to be a possibility. Let him not be content to base his denunciations upon the unfavorable report of vital statisticians of the deleterious influence of fœticide upon populations in the gross, or upon individuals in detail, not upon the verdicts of Coroner's juries, as demonstrating its danger to material life, but upon that divine command, which has found its answering echo in the great heart of humanity, for six thousand years, "Thou shalt do no murder!" W. H.

To Readers and Correspondents.

The obituary notice of Dr. A. B. Shipman, late of Syracuse, N. Y., formerly Professor of Surgery in the Indiana Medical College, has not yet been received. —— One of our subscribers, in order to complete his set of the JOURNAL, wishes to procure the volume for the year 1864. A liberal price will be paid for the same, on addressing the EDITOR. —— The word LOOT seems to puzzle some of our readers. It is an Oriental word — much used during the Anglo-Chinese war, and the Sepoy rebellion, and literally signifies PLUNDER. Its

applicability seems obvious. —— The venerable Dr. Usher Parsons, of Providence, R. I., is dead. He was the last surviving medical officer who was present at Perry's victory. He had reached the ripe age of eighty. —— Lallemand's *porte caustique* can be procured at the stores of our advertisers, Bliss & Sharp, or Chas. Degenhardt's. —— We shall publish the matter, requested by our Quincy correspondent, next month. —— The absence of our publisher, temporarily, from the city, must be our apology for delay in issue of the JOURNAL, and replies to letters. Every effort is being put forth to satisfy our friends, on all points. —— The present number closes the volume, and a glance will show the large increase in its bulk over previous years. Examination of the *Index* will show a variety and importance in the matter contained, which should satisfy the demands of the most exacting subscriber. Arrangements for the coming year are such as to warrant the statement, that the volume for 1869 will surpass any of its predecessors.

LITERARY EXCHANGES. — The *Atlantic*, *Our Young Folks*, and *Every Saturday*, published by Fields, Osgood & Co., (successors to Ticknor & Fields) show marked improvement under the new *regime*. We cordially commend each to the patronage of the families of our readers. —— The New York *Independent* comes to us enlarged to mammoth proportions. It is probably the largest single sheet periodical now issued in the world. To a man who wishes to keep "posted" in what the world is thinking about — irrespective of political or theological opinions — it affords "just the thing." It is *Independent* to the verge of audacity, and, although mammoth in its proportions, its lucubrations are never heavy or unreadable. The price remains the same as before the enlargement. —— Our thanks are due to Messrs. Turnbull & Murdoch, of Baltimore, for a proffered exchange with the *New Eclectic Magazine*, published by them. The *New Eclectic* commences its fourth volume on January, 1869. It is handsomely gotten up, and is filled with excellent and spicy

reading matter. The January number contains a fine portrait of John Ruskin, the great Art critic. $4.00 per annum. Handsome discount to clubs.

An Important Matter.

The position of Medical Inspector during the recent war was found one of great importance both to the army and the government. The former were better provided for, and, meanwhile, the interests of the latter were subserved.

In common with our fellow-citizens, we desire to have all unnecessary governmental expenses put an end to; but we yet believe in the scriptural statement: "There is that scattereth, and yet increaseth — there is that withholdeth more than is meet, and cometh to poverty." A business man who is under the pressure of large liabilities would scarcely be credited with prudence, should he dispense with his bookkeeper and necessary overseers of the work; and so the government can not afford to dispense with the important office of Medical Inspector of Marine Hospitals, etc. Such an officer, if properly chosen, will save to the people ten times his salary in a single year. Aside from his assisting in the better development of the hospitals in a sanitary point of view, he can prove most useful in stopping pecuniary leakages. One notable instance of this latter service has come to our own immediate knowledge. A faithful public servant of this sort saved a large amount to the government by careful inspection of a single hospital. The JOURNAL chronicles his name with peculiar pleasure. We refer to the accomplished Inspector and Special Agent, W. D. Stewart, M.D., whose recent visit to Western hospitals was noticed in a former number of the JOURNAL. A fine professional scholar, of large practical experience and unswerving integrity, he is exactly the right man in the right place, and we trust that amid whatever official changes may be made, he will be retained, both for the credit of the profession and the advantage of the public. Of his politics we know nothing, and we do not scruple to say we care less. *Fiat justitia.*

Introductory Addresses

By E. B. Stevens, M.D., Theoph. Parvin, M.D., and J. Aitken Meigs, M.D., are on file for notice. We have only space here to say that Dr. Stevens' address before the Ohio State Medical Society, and his Introductory to the College session, are productions of the highest order, and sufficient alone to establish a wide reputation for their accomplished author.

Book Notices, etc.

CLINICAL LECTURES ON DISEASES OF THE LIVER, JAUNDICE AND ABDOMINAL DROPSY. By CHARLES MURCHISON, M.D., F.R.S., etc., etc. New York: William Wood & Co., publishers, 61 Walker Street. 1868. Pp. 556.

A compact, perspicuous, and valuable little book, which fills a want long experienced by the profession. We cordially commend it to our readers. Since Dr. Budd's excellent treatise, we have met none on the subjects treated which has given us more pleasure in its perusal.

A large number again crowded out. We trust both authors and readers will have a patience we can not ourselves claim.

OBITUARY.

DIED, in this place, on Tuesday, November 24th, after a brief illness of congestion of the stomach and bowels, Henry W. Davis, M.D., in his 42nd year.

Dr. Davis began the study of medicine in Carlisle, Ind., with his uncle, Dr. Helms, and concluded while attending Medical College, in Baltimore, as private student of Prof. Samuel Chew, M.D., and graduated at the same College, in the spring of 1852. In 1854 he located in this place, and began the practice of his profession (associated with Dr. John Tenbrook), which he pursued, with great satisfaction and credit to himself and his patrons, until April, 1861.

On the breaking out of the Rebellion he entered the service as a private, in Company E, 12th Illinois Infantry Volunteers. Shortly after reaching Springfield he went before the State Board of Medical Examiners, and was

made a surgeon of volunteers, and immediately after became a member of the Board, which position he held until, by his request, he was made Surgeon of the 18th Regiment Illinois Infantry Volunteers, with which he served until made Assistant Surgeon U. S. Volunteers, and assigned as Inspector of the 16th Army Corps.

In 1865 he was promoted to Surgeon U. S. Volunteers, and assigned to duty as Medical Director, Department West Kentucky, with headquarters at Paducah, where he continued until the close of the war.

Since Dr. Davis became a citizen of this State, he has been notably identified with medical organizations of county, district, and State, and his name is recorded in each as the author of valuable contributions to their medical archives.

From the effects of a dissection wound, received while on duty at Little Rock, Ark., he was disabled from engaging in the general practice of medicine, but he gave his attention to surgery, in which he excelled, and to which he was specially devoted.

Few men enjoyed more of the confidence and admiration of his associates than Dr. Davis, and none died more lamented for his professional, literary, and social accomplishments.

PARIS, ILL., 1868.

CALIFORNIA WINES.

IN a former number of this JOURNAL we called attention to the Wines introduced in this market by the El Dorado Wine Company. These Wines fully sustain the endorsement we then gave them. The fact of the Company manufacturing their own Wine and Brandy; the reputation of the gentlemen, many of whom are old residents of this city, connected with it, is a sufficient guarantee that their Wines are as represented—*pure* and *unadulterated*; then add to this the rigid tests to which they have been subjected (being of recent introduction here), only confirms our former opinion.

Every one knows the necessity for *Pure Wines* for the sick-room and hospitals. Too great care cannot be observed. We again commend the Wines of this Company, and shall hope that every Drug Store will keep them—that the profession, in prescribing, may always find them readily at hand.

The trade-mark of the Company is peculiar (bear and face), and can not well be mistaken. The office of the Company is at 122 South Clark Street.

LOOT.

American and Foreign.

Prof. Gross, in the course of his eloquent response, on his second reception, referred to in the last number of the JOURNAL, observed:

"I need not say how deeply sensible I am of your kindness. I rejoice to be again in the midst of those with whom I have so long labored to uphold the honor and dignity of our noble profession, and in whose personal success I shall ever feel a deep, nay, let me add, a parental interest. It is to me no less gratifying than it is true, to be able to say that, during my visit abroad, where I had an opportunity of seeing many of our most distinguished brethren in the Old World, I saw no more able, learned, or skillful practitioners, teachers, and writers, than are assembled here to-night. I think, sir, that if a traveler learned nothing more than to appreciate fully his country's greatness, he would be amply compensated for the peril and expense of his voyage across the Atlantic. As God made woman more beautiful and perfect than man, because he created her last, so he endowed this continent — this last and best gift to the human race — with beauty and perfection nowhere visible in the Old World.

"In our profession an American traveler finds nothing of any importance, that is either new or unknown here. Every one acknowledges, with a hearty, free will, the extraordinary activity, enterprise, and talents of our physicians and surgeons, and the rapid strides with which we are developing our national medical talent. Chassaignac, the great French surgeon, said to my honored colleague and myself, in one of our visits to the famous Lariboisier Hospital, "You have just reason to be proud of your country. America at this moment wields the surgical sceptre of the world." Her military surgeons have no equals. The reports of the Surgeon-General of the United States are every where read with avidity. Some of our works are used as text-books in the British schools of medicine, and a number of them have been translated into the continental languages. It is amusing how small and scanty are the libraries of many of the medical celebrities of Vienna, Berlin, London, Edinburgh, Dublin, and other cities, in comparison with those of similar professional standing here; and, although it would not be fair to judge a man's knowledge by the number of books he reads, yet there can be no doubt that the more labor of this kind he performs, the more likely will he be to become intelligent and accomplished. In no country that I saw, do people read so much as here. It is a well-known fact, that many of the English medical works, reprinted in America, pass through more editions than they do at home."

W. M. Cornell, M.D., LL.D., in the *Guardian of Health*, discourses thus on the *Treatment* of Apoplexy:

The common treatment in an attack of apoplexy, is to bleed profusely from the arm or the head, then place the patient on

a seat, with his feet in a tub of hot water, and to apply ice to the head, or pour upon it a stream of *cold* water from some height. With this treatment they nearly all die — that's all. Yet it has been that usually pursued for three thousand years, and it is difficult to get out of it. A *better* treatment was pointed out, some twenty years ago, by Dr. Samuel A. Cartwright, of New Orleans, and published in the "Medical and Surgical Journal" of that city, which Dr. C. says, "fell stillborn from the press." I may add, like all other notions which conflict with "the books," and the general *routine* practice. Still, the writer has followed it during more than twenty years, and has not lost a patient with ordinary apoplexy, or that from *sun-stroke*.

Dr. Cartwright said, "my theory of apoplexy is nearly the same as that of Marshall Hall's; but my practice is much better and easier. For twenty-five years I have been in the habit of curing apoplexy almost as readily as intermittent fever. Physicians will not avail themselves of the practice, because the old theory of apoplexy will not let them. The laryngismus and trachælisimus, that Hall speaks of, can be cured by a mixture of salt, mustard, ipecac, and tincture of assafœtida, put into the mouth and fauces very speedily. Patients can swallow that, when the deglutition of plain water is impossible. If the stertor or ronchus be very great, with stupor corresponding to the stertor and relaxation of the spinchters, I add capsicum, quinine, and laudanum, in full doses, to the mixture. At first it strangles, but by turning the patient on his side, and discharging the throat of the tough mucus or phlegm, *always in it* in such cases, and trying again and again, the patient will soon be able to swallow enough to vomit. If this be assisted by hot water to the head and stomach, the patient will soon regain his senses, after having taken enough to vomit. In my essay on apoplexy, I was afraid of spoiling it, by saying much on hot water, as the medicine above mentioned will do in mild cases; but *coup de soleil* can not be cured without the hot water."

Now, this was published in the "Boston Medical and Surgical Journal," more than twenty years ago, and, as said above, the writer has tried it successfully all this time. But he does not know of a single other physician who has. They have all tried the bleeding and the *ice*-treatment, and they have nearly all died. Thus once has the writer stepped aside from a mere *Guardian* of Health, to tell how to *restore* it in apoplexy or sun-stroke.

To avoid apoplexy, live so as not to grow too fat, shun all employment that compels you to stoop much, take chiefly a vegetable diet, lead a quiet life, and, as Dr. Abernethy used to tell his dyspeptic patients, "live like a Christian." If you have been in active business, continue it. This is of the utmost importance. Read Milton's Epitaph on the death of old Hobson, the University carrier, or old Parr's death at the Palace. Like them, many die when just beginning to *live easy; i. e.*, living easy kills them quickly:

"Here lies old Dobson; Death has broke his girt,
And here, alas! hath laid him in the dirt;
Time's such a shifter, that if truth were known,
Death was half glad when he had got him down,
And surely death could never have prevailed,
Had not his weekly course of carriage failed.
Here lieth one, who did most truly prove
That he could never die while he could move.
Time numbers motion; yet, without a crime
'Gainst old truth, motion numbered out his time.
Rest that gives all men life, gave him his death,
And too much breathing put him out of breath."

This is the case with multitudes. Having nothing to do but eat and fatten, they soon die.

Statistics of Inebriation.

Dr. McKinley, of this city (St. Louis), furnishes the following table of Statistics on Inebriation in the United States, which have been compiled by him after much careful research, and contain some very interesting yet startling facts. He says:

Taking the population of this country at forty millions, we find that of 300 men, 122 never drink ardent spirits at all, 100 drink moderately, but not to intoxication, 50 are ephemeral drinkers, 25 drink periodically, called "spreeing," and 3 are habitual inebriates. To every 178 who drink, 3 are confirmed inebriates, 25 are periodical drinkers, 50 are ephemeral drinkers, and 100 are moderate drinkers. Total, 178; non-drinkers, 122. Grand total, 300. One confirmed inebriate to every 59⅓ of men. Of 700 women, 600 never taste alcoholics of any kind, 30 taste wine occasionally, 17 taste ardent spirits occasionally, 36 drink beer or ale constantly, 14 drink ardent spirits periodically, and 3 are habitual inebriates. To every 100 who drink, 3 are confirmed inebriates, 14 drink ardent spirits periodically, 36 drink beer or ale constantly, 17 taste ardent spirits, and 30 taste wine occasionally. Total, 100; non-drinkers, 600. Grand total, 700. Total of both

sexes enumerated — drinkers and non-drinkers — 1,000; total of both sexes who drink (out of 1,000), 278. Predominance in *confirmed inebriates* of the sexes: 3 men in every 178; 3 women in every 100; 1 confirmed inebriate to every 33⅓ of women.

Fewer women drink than men; but a larger proportion of them become habitual drinkers.

The following deductions are made from the above statistical basis, and relate to the aggregate population of adult males and females, *using* and *not using* alcoholic drinks: In 1,000 men there are 10 confirmed inebriates; in 1,000 men, there are 593⅓ drinkers of all kinds, who drink to some extent or other.

Of women — 1 in every 7 use alcoholics in some form; in 1,000 women, there are 142⅞ who drink to some extent; in 1,000 women, 4⅛ are confirmed inebriates.

Debauch or ephemeral drinkers, rarely become habitual, but periodical drinkers; the latter rarely become habitual inebriates, as the violence of their drinking is too great, and leads to disgusting satiety, and hence to intervals of sobriety. The moderate drinkers form the class from which the habitual inebriates are chiefly derived; prolonged moderate drinking cultivates the diathesis. The foregoing statistics are drawn from the seggregational population, including small and large towns, but excluding the gregarious population of cities, where the ratio of drinkers is higher. — *St. Louis Medical Reporter.*

Vaginal Irritability.

At the April meeting of the Paris Medical Society, M. Charrier described the following case:

In September, 1867, a young woman was sent to him, who, after four months of married life, could no longer endure coitus. Copulation, at first excessive, became by degrees so painful, that she compares it with a severe toothache; indeed, she fainted occasionally, when the pain was for a moment suspended.

Ext. Belladonna, *Ext. Opii*, tepid baths, etc., were tried without benefit.

On examination, Charrier found the hymen ruptured, the myrtiform carunculæ not unusually large, no vulvitis, no vaginitis, no dryness of vulva or vagina; shrieks of pain were elicited by touching the carunculæ with the end of a sound. The least touch of the same with the tip of a finger, or even

with a feather, produced the same effect. An attempt to pass the little finger into the vaginal orifice was resisted by strong contractions, similar to those met with in examinations for fissured anus.

Charrier instituted the following treatment: After a bath of two hours duration, she was placed thoroughly in anæsthesia; then the bladed speculum (for the removal of polypi), was introduced into the vagina, by a screw-like movement, and turned in every direction, as in the forcible dilatation of the anus. Some blood appeared. Then a very thick tent, (mèche), covered with extract of belladonna and glycerin, was introduced.

That night coitus took place without pain, and for two weeks it was repeated morning and evening. The husband had since written that his wife remained free from pain, and that she is now three months with child.—*Algem. Med. Central Zeitung*, No. 58, 1868.—*Medical and Surgical Reporter.*

FOREIGN ITEMS.

OVARIOTOMY.—M. Kœberle has reported to the Academy of Sciences, Paris, the statistical results of sixty-nine cases of ovariotomy, as follows:

1st. Considered with reference to adhesions.

The proportion of deaths of cases presenting no adhesions was one-seventh.

Of those presenting slight adhesions, one-fifth.

Of those with extensive adhesions one-half.

No operation having been left uncompleted.

These results agree very closely with those of Spencer Wells (of London), his proportions being one-sixth, one-fifth and one-half respectively. Six per cent. of his operations having been left uncompleted in consequence of extensive adhesions.

2nd. The gravity of the operation is proportional to the loss of blood.

3rd. The mortality has been exactly proportional to the duration of the operative proceedings.

4th. The causes and the ratio of mortality were as follows: septicæmia, 10.14; peritonitis, 10.14; peritonitis and septicæmia, 8.7; intestinal strangulation, enteritis, and intestinal tympanitis, each 1.45.

5th. The duration of life, in twenty-four fatal cases, was as follows: In one case, one day; in five cases, two days; in seven cases, three days; in four cases, four days; in one case, six days; in three cases, seven days; in two, eight days; and in one instance, one month after the operation.

6th. In thirteen cases both the ovaries were removed simultaneously, and in two of these the uterus was also extirpated, together with the ovaries; of these there were seven cures, and six deaths.

7th. The ages of the patients ranged from seventeen to sixty-two; the largest proportion of successful cases being comprised between the ages of thirty and thirty-five years. Above the age of fifty the mortality being five-sevenths.

8th. Adhesions to the abdominal parietes, to the epiploon, and to the intestine, were most frequently encountered in the successful cases. Those to the pelvis, especially those to the uterus, having occasioned a more considerable mortality, as has been also the result of adhesions to the liver and the mesentery.

9th. In reference to the operation of paracentesis, the results show, that in those cases in which it had not been performed, the mortality was one-third, whilst after one such operation it was but one-fourth; and six cases, which had been twice tapped, all recovered.

Of those who had been subjected to this operation from three to eight times, the mortality was great. Of three cases, in which *Iodine* injections were used, one only recovered.

10th. The mortality was proportional to the length of the incision.

11th. The mortality was proportional to the weight of the tumors.

12th. Chloroformic vomiting had no influence in the cases without adhesions, whilst its influence upon the mortality of grave cases was very marked.

13th. The mortality has been notably diminished, by reason of improvements in operative proceedings lately introduced.

CHOLERA MORBUS. — M. Chevalier has presented to the Academy of Medicine (Paris), a communication upon the production of this malady by the eating of ices in summer.

M. SHÖNBEIN (of Bâle, Switzerland) has discovered, and prepared, a test paper for the detection of *Hydrocyanic Acid*, even when present in the most extreme atomic division.

GOITRE CRETINISM. — M. Garrigou, consulting physician at the Mineral Springs of Aix, asserts that these endemics are due to the existence of *Magnesia*, and more especially the silicate of that earth, in the soil, which modifies all organisms, both vegetable and animal. His doctrine is based upon extensive observations made in the districts of the Pyrenees, where these maladies are endemic, and are coincident with such geological constitution.

M. BERLIN (France) reports twenty-four new observations upon the therapeutic effects of irritating injections of *Chloride of Sodium*, *Nitrate of Silver*, and *Tincture of Iodine*, into the interior of morbid tissues. The solution of *Chloride of Sodium* was used at its maximum of concentration, that of *Nitrate of Silver* in the proportion of one-fifth, and the *Tincture of Iodine* was prepared according to the following formula: Distilled water, 40 grammes; *Iodide of Potassium*, 1 gramme; *Tincture of Iodine*, 10 grammes. The results obtained were the following, viz.:

I. Tumors formed by the development of the thyroid, 8; cures, 5; improvement, which might be considered as cures, 1; insignificant improvements and negative results, 2.

II. Tumors formed by the development of the lymphatic ganglia, of which there were two having a tendency to suppuration, 3; cures, 3.

III. Tumor formed by the development of a serous bursa, 1; cure, 1.

IV. Neuralgias, more especially sciatic, 7.

1st. Old sciatica treated with the silver injection, 2; cures, 2.

2nd. Old sciatica treated with salt water, 2; cures, 0.

3rd. Recent sciatica treated with salt water, 4; cures, 2.

4th. Recent sciatica treated with the silver injection, 1; cure, 1.

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